Service Manual

ViewSonic GS815

Model No.VCDTS21577-1

21" Digital Controlled Color Monitor (20" viewable) Professional Series

GS815_SM_ 113 - Rev. 1.0 - September 2000

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Revision History

Revision	Date	Description Of Changes	Approval
1.0	9/18/00	Initial Issue – DCN690	T. Sears

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FCC Statement

This equipment has been tested and found to comply with the limits of Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and for if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause unacceptable interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of following measures

- Reorient or relocate the receiving antenna.
- Increase the separation between equipment and receiver.
- Connect the into an outlet on circuit different from that to which the receiver is connected.
- Consult the dealer or an experience radio/TV technician for help.

FCC Warning

To assure continued FCC compliance, the user must a grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. Also, unauthorized changes or modifications to ViewSonic products will void the user's authority to operate this device. Thus ViewSonic will not be held responsible for the product and its safety.

CE Certification

CE this device complies with the requirements of the ECC directive 89/3366/EEC with regard to "Electromagnetic compatibility."

Safety Guidelines

Caution: Use a power cable that is properly grounded. always use the AC cords listed below for each area

USA	(UL)
Canada	(CSA)
Germany	(VDE)
Switzerland	(SEV)
Britain	(BASE/BS)
Japan	(Electric Appliance Control Act)

In other areas, use AC cord which meets the local safety standards.

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Appendix A Schematic
Appendix B PCB Layout
Appendix C Exploded Drawing

Chapter 1 Features

1.1. On-View on-screen-display digital controlled

1.1.1. User friendly 4-key control and On Screen Display for finest screen adjustment:

- **CONTRAST**
- **BRIGHTNESS**
- **H-SIZE**
- **H-POSITION**
- **V-SIZE**
- **V-POSITION**
- **PINCUSHION**
- **PIN-BALANCE**
- **TRAPEZOID**
- **PARALLELOGRAM**
- **ZOOM**
- **TILT**
- **CONVERGENCE**
- **V-LINEARITY**
- **HOOKING**
- **COLOR**
- **PURITY**
- **OSD POSITION**
- **MOIRE**
- **DEGAUSS**
- **LANGUAGE**
- **DATA RECALL**

1.1.2. Factory geometric settings for 12 preset timings.

1.1.3. Geometric settings for 6 user definable timings.

1.1.4. Factory setting for Color Temperature modes (5000°K, 6500°K,9300°K).

1.1.5. Auto-tracking for stable synchronize system.

1.2. Power-line-input operating range

90~132Vac/60Hz or 180~264Vac/50Hz universal

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1.3. DPMS (Display Power Management System)

1.3.1. The GS815 is compliant with Energy Star as well as VESA DPMS spec.

1.3.2. The power dissipation is less than 15 watts for Suspend/Standby mode and 3 watts for Off mode.

1.4. Operating Frequency range

The GS815 provides wide operating ranges of horizontal frequency from 30 to 121KHz and Vertical frequency from 50 to 180Hz. This range makes the GS815 to be compatible with most video timing standard such as VGA, SVGA, VESA, XGA, ... and etc. It supports up to 1024 x 768 @75Hz, 1280 x 1024 @75Hz and 1600 x 1200 @ 75Hz, 1600 x 1200 @ 85Hz and 1920 x 1440 @ 75Hz.

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Chapter 2 Specification

CRT	HITACHI, 21" M51LQV183X48(A) 0.25mm stripe pitch, tinted, Low surface and anti-reflection and anti-static charge, hospher EIA TYPE X, transmittance 43%
Signal Input Interface	Video: RGB analog 0.7Vp-p/75ohm (1Vp-p with sync) Sync: H.V. Separate Sync H.V. Composite Sync (TTL Compatible) Sync on green
Synchronization	Horizontal: 30 to 121KHz for analog input Vertical: 50 to 180Hz Non-interlaced/interlaced for analog input
Connector	Signal: 15pin mini D-sub Power: 3-pole receptacle
Video Bandwidth	200MHz nominal
Nominal Display Area	380x285mm
Power Supply	100 ~ 240 Vac Universal
Power Consumption	170W max.
Power Saving	Suspend <15W OFF < 3W

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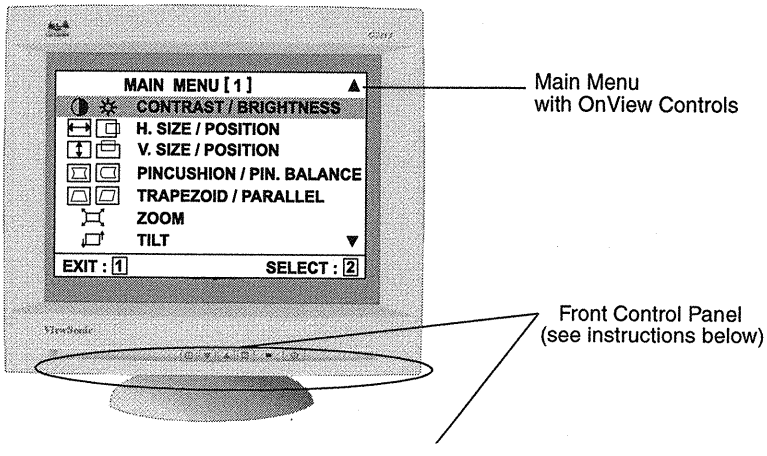
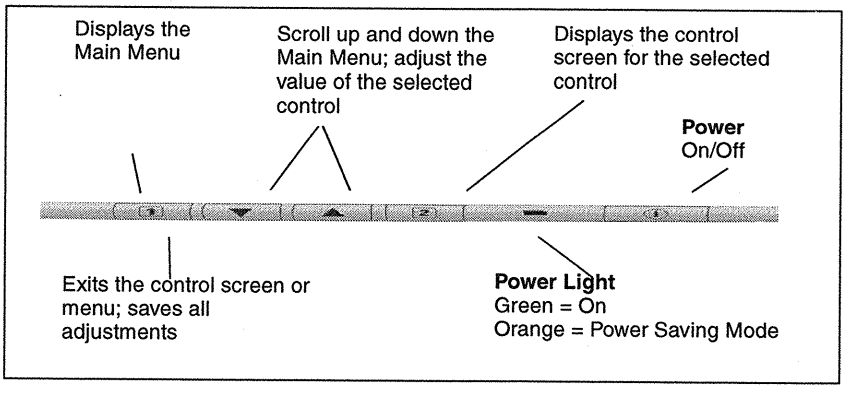
Chapter 3. Controls

Adjusting the Screen Image

To adjust the screen image, follow the instructions in steps 1 through 5 below. You will use the buttons of the Front Control Panel to adjust the OnView® controls, which are explained in "OnView® Controls" on page 3-2




Displays the Main Menu
Scroll up and down the Main Menu; adjust the value of the selected control
Displays the control screen for the selected control
Power On/Off
Exits the control screen or menu; saves all adjustments
Power Light
Green = On
Orange = Power Saving Mode

* The monitor automatically *degausses* each time you turn it on, removing the buildup of magnetic fields that can affect color purity and convergence. To prevent possible damage, if you turn the monitor off, then immediately on again, wait 20 minutes before doing this again. **Do not turn the monitor on and off repeatedly.** To manually degauss the monitor, see the instructions on pa ge 3-6

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Do the following to adjust the screen image:

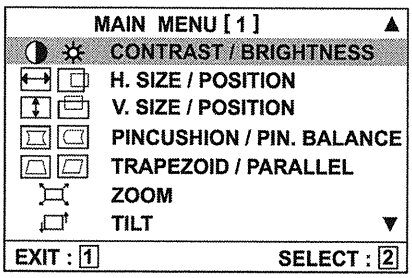
1 To display the Main Menu, press button [1].
2 To display a control you want to adjust, press ▲ or ▼ to scroll up or down the Main Menu.
3 To display the control screen for the selected control, press button [2].
4 To adjust the selected control, press the up ▲ or down ▼ buttons.
5 To save the adjustments and exit the menu, press button [1].

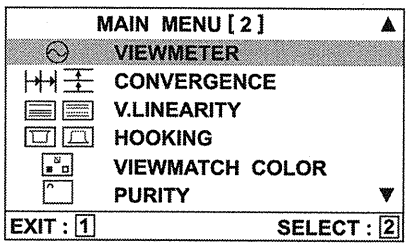
OnView® Main Menu

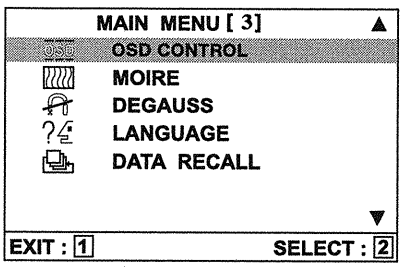
The three menus shown below are parts 1, 2, and 3 of the Main Menu.

NOTE: Some controls on the Main Menu are listed in pairs, such as Contrast/ Brightness. To toggle between pairs like these after displaying a control screen (Step 3 above), press button [**2**].

Shortcut: Before displaying the Main Menu, press button [2] to display the Contrast/Brightness control screen.







Main Menu Controls

The menu items shown below can be adjusted by using the up ▲ and down ▼ buttons.

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OnView® Controls

CONTRAST Adjusts the difference between the image background (black level) and the foreground (white level).

BRIGHTNESS adjusts background black level of screen image.

HORIZONTAL POSITION moves screen image left or right.

HORIZONTAL SIZE adjusts width of screen image.

VERTICAL POSITION moves screen image up or down.

VERTICAL SIZE adjusts height of screen image.

PINCUSHION curves the vertical sides for the screen image.

PIN BALANCE curves the vertical edges of the screen to the left or right.

TRAPEZOID slants the vertical edges of the screen image.

PARALLEL makes the vertical edges of the screen image parallel.

ZOOM expands and contracts the entire screen image.

TILT rotates the entire screen image.

VIEWMETER ® displays information regarding the current input signal coming from the graphics card of the computer.

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OnView® Controls (Continued)

H. CONVERGENCE (Horizontal Convergence) adjusts vertical color alignment. Use this control when red or blue borders are present around the vertical segments of black letters on a white background.

V. CONVERGENCE (Vertical Convergence) adjusts horizontal color alignment. Use this control when red or blue borders are present around the horizontal segments of black letters on a white background.

V. LINEARITY- CEN (Vertical Linearity Center) adjusts the vertical distortion at the center of the screen image.

Note: V. Linearity is an advanced control to used for setup and calibration only.

V. LINEARITY- SYM (Vertical Linearity Symmetry) minimizes the distortion (squeezing or stretching) of geometric shapes between the top and bottom of the screen image).

Note: V. Linearity is an advanced control to used for setup and calibration only.

HOOKING - TOP adjusts the top corners of the screen image.

HOOKING - BOTTOM adjusts the bottom corners of the screen image.

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OnView® Controls (Continued)

VIEWMATCH® COLOR provides several color options: several preset color temperatures and User Color which allows you to adjust red (R), green (G), and blue (B). The factory setting for this product is 9300K (9300° Kelvin).

9300K — Adds blue to the screen image for cooler white (used in most office settings with fluorescent lighting).

6500K — Adds red to the screen image for warmer white and richer red.

5000K — Adds blue and green to the screen image for a darker color.

USER COLOR — Individual adjustments for red, green, and blue.

PURITY adjusts the uneven color of the overall image. For example, if one area of a color appears darker than another area, first use the DEGAUSS feature. If color is still uneven, use the PURITY control.

OSD CONTROL allows you to move the on-screen display menus and control screens.

V. MOIRE reduces vertical interference patterns that appear as ripples, waves, or unwanted background color textures. Interference patterns of this type are most noticeable when viewing images having closely spaced lines or finely detailed patterns.

H. MOIRE reduces horizontal interference patterns that appear as ripples, waves, or unwanted background color textures. Interference patterns of this type are most noticeable when viewing images having closely spaced lines or finely detailed patterns.

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OnView® Controls (Continued)

DEGAUSS removes the build-up of magnetic fields that can cause irregular colors to appear around the edges of screen images. There are two ways to degauss the display: automatically by turning the monitor on, or manually by selecting the Degauss control from the menu.

With Degauss selected from the menu, press button [2] to manually degauss the monitor.

Important: *Do not degauss repeatedly. Doing so can be harmful to the display. Wait at* least 20 minutes before selecting this control again.

LANGUAGE allows you to choose from among several languages for the menus and control screens: English, French, German, Italian, and Spanish.

DATA RECALL returns adjustments to the original factory settings if the display is operating in a factory Preset Timing Mode listed in this user guide.

Exception: This control does not affect changes made with the **User Color** control.

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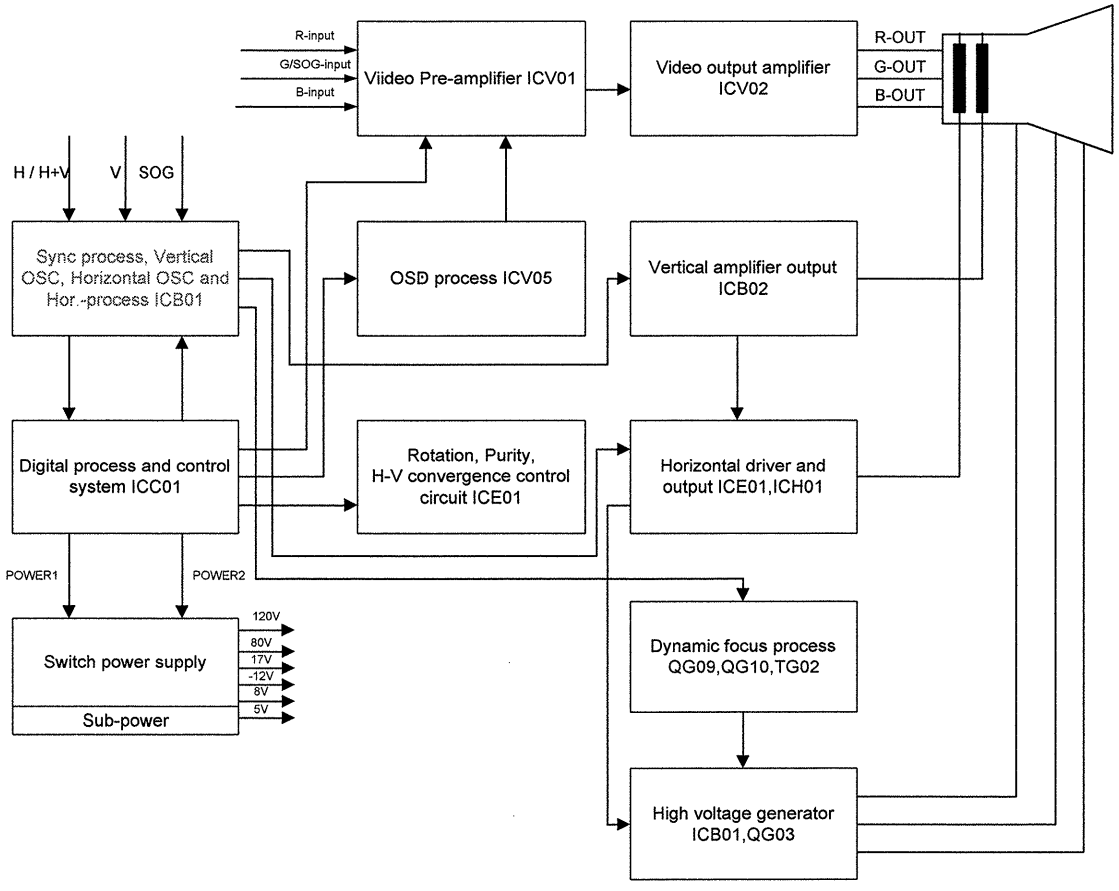
Chapter 4 Block Diagram



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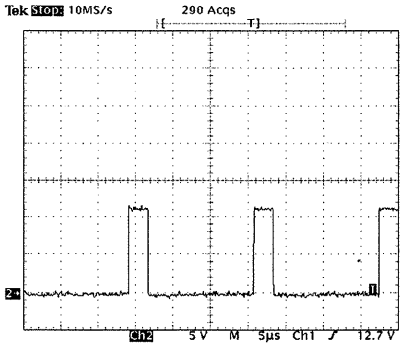
Chapter 5 Measured Waveforms



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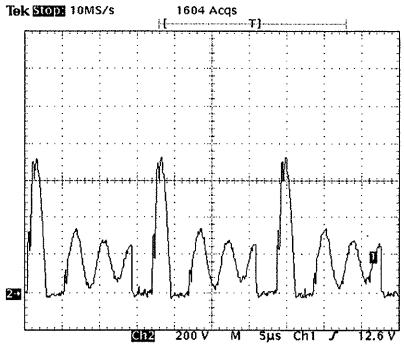

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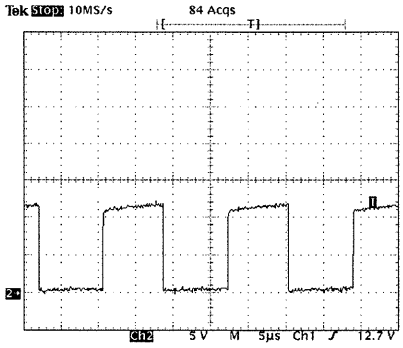

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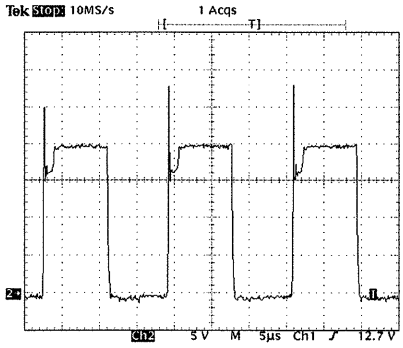

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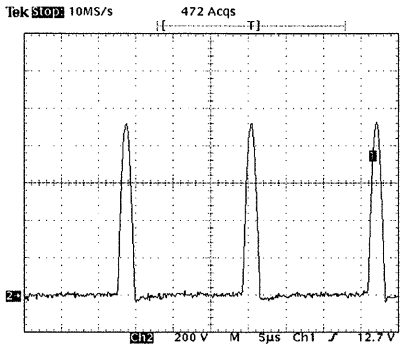

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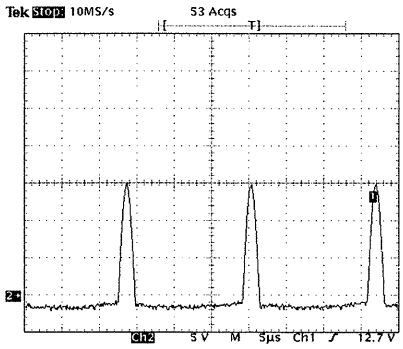

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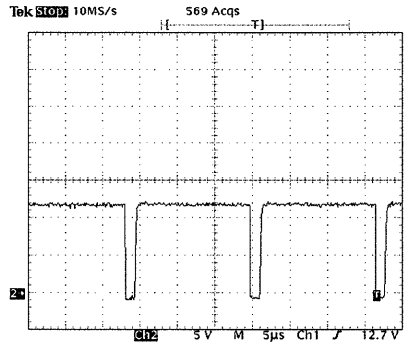

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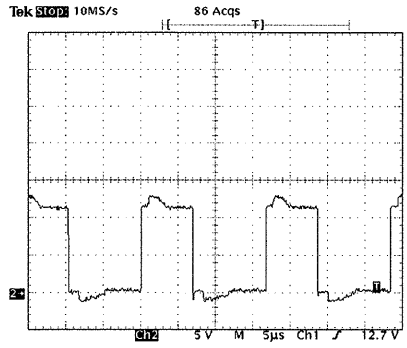

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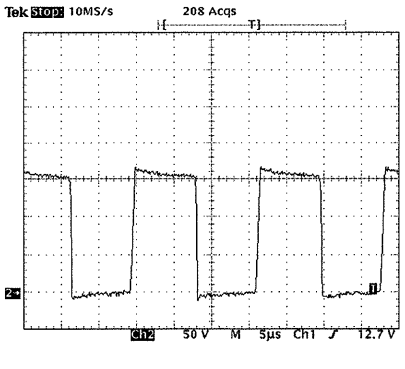

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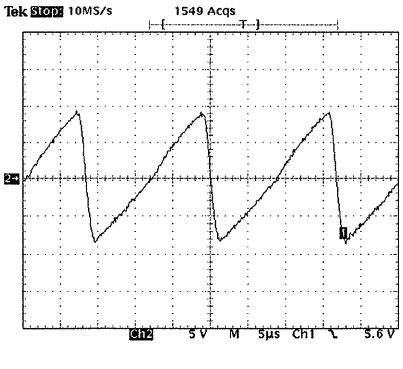

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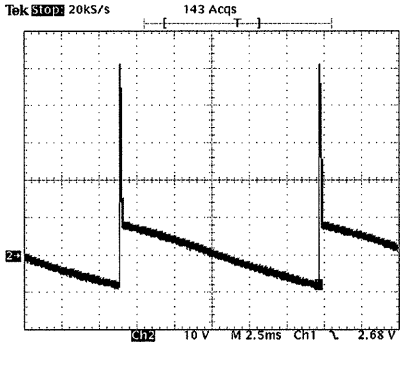

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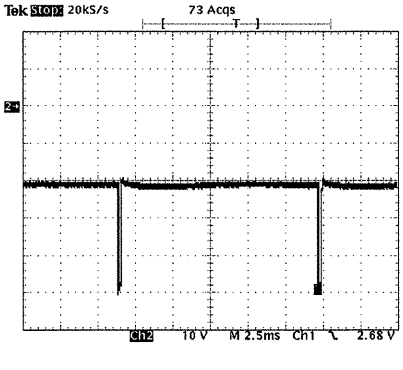

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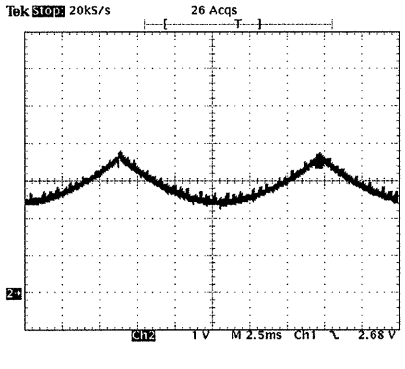

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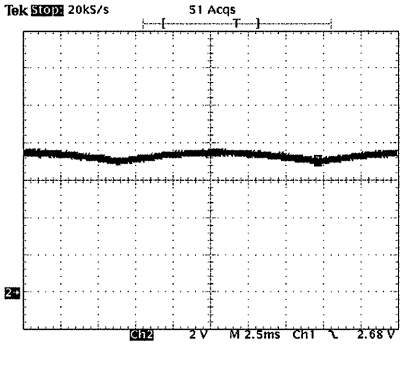

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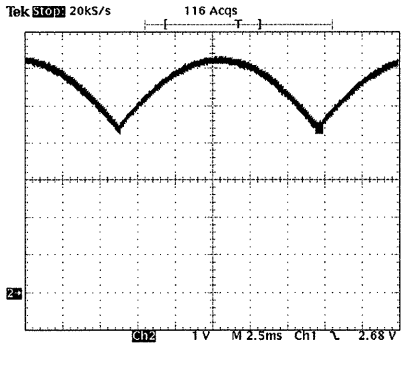

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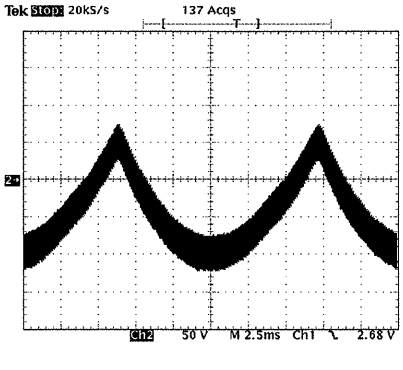

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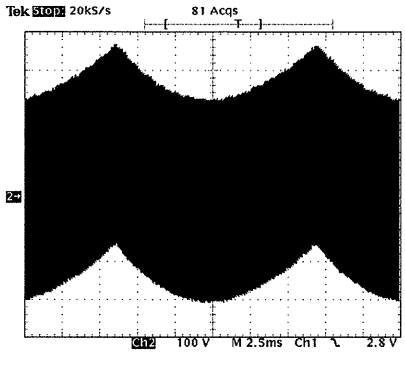

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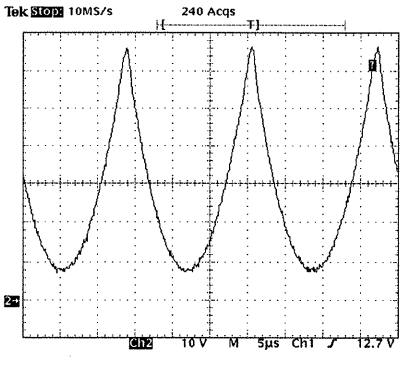

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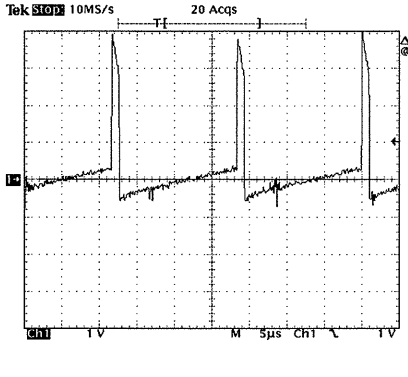

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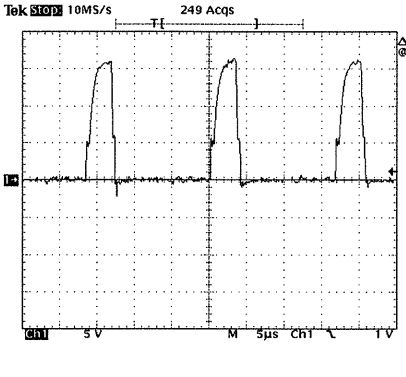

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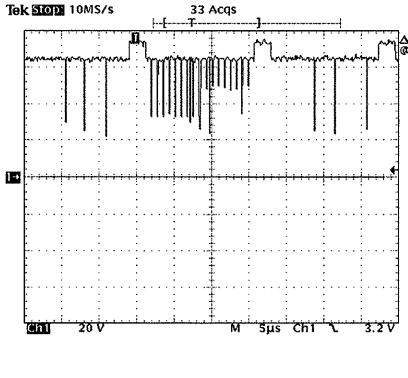

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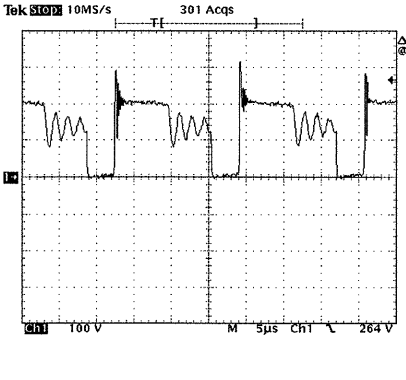

22 May 1997
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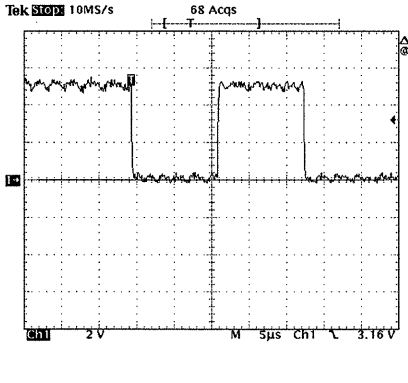
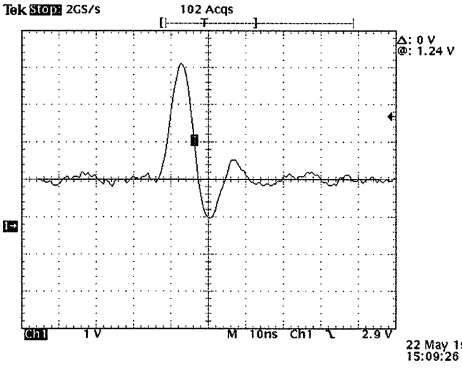


22 May 1997
14:44:08 **S23**



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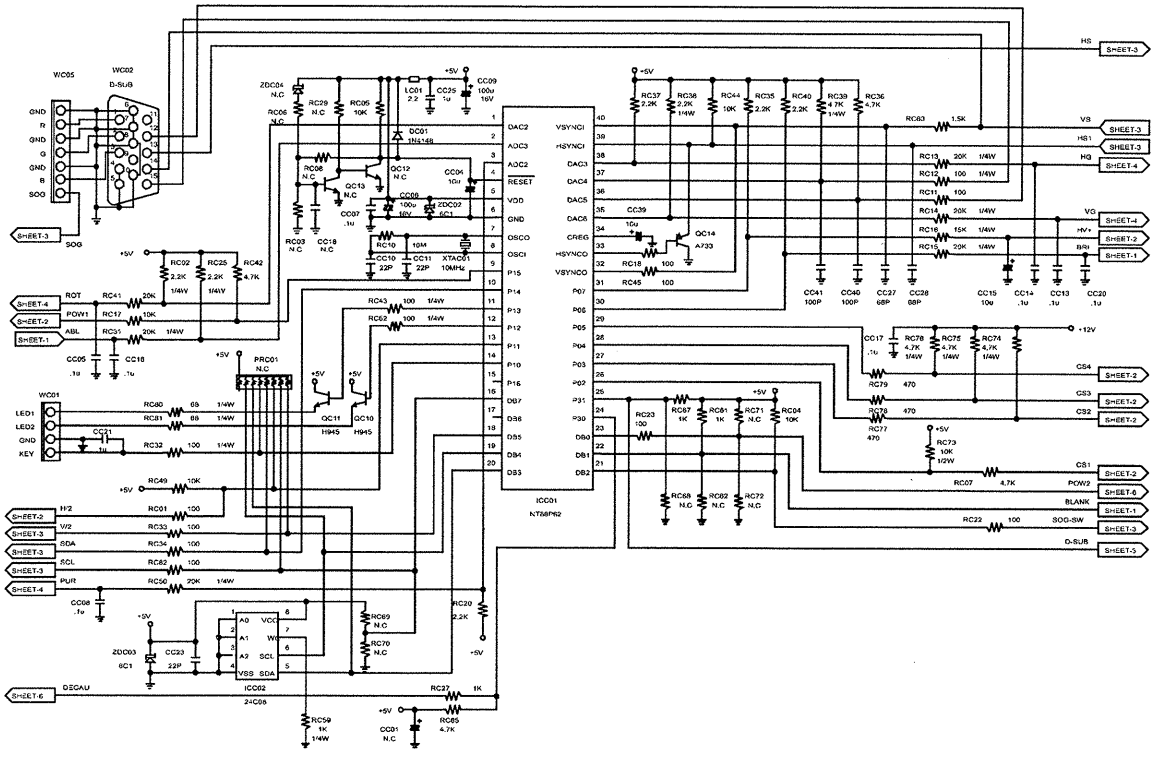
Chapter 6 Theory of circuit operation

6.1. Micro Controller System



The micro controller system is composed of the MCU, the serial E2PROM, the voltage monitor circuit, the encoder signal reshaping circuit.

6.1.1. The MCU (ICC01, NT68P62) mainly provides the following functions:

6.1.1-a. Detect the system input signals and send proper control signals via general purpose I/O pins.

6.1.1-b. Output 6 PWM's to adjust the voltage controlled functions such as BRIGHTNESS, TITL,..,etc.

6.1.1-c. Control the following characteristics of the deflection IC TDA4856 and the video pre-amp TDA4887 via I2C bus:

- **TDA4856:**
  1. H- SIZE,H-POSITION
  2. V-SIZE,V-POSITION
  3. PINCUSHION, PIN-BALANCE
  4. TRAPEZOID, PARALLELOGRAM
  5. H-CONVERGENCE, V-CONVERGENCE,
  6. V-LINE-CEN, V-LINE-SYM
  7. HOOKING

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8. MOIRE
9. HD-DUTY
10. Internal clamping pulse position & width

- **TDA4887:**
  1. Contrast, OSD Contrast
  2. R,G,B gain

6.1.1-d. Control the OSD IC D1642 via IIC bus to display the monitor status.

6.1.1-e. Detect the input sync characteristics via TDA4856, identify the input timing, read the according settings in the E2PROM and then send proper controls such as CS-switch, LEDs display, Contrast, Brightness, H-Size, H-Pos, ..., etc.

6.1.1-f. Monitor the level of DAC output ABL and then send the proper contrast setting in TDA4887 to achieve the beam current limitation .

6.1.1-g. Set and detect the display board status and implement the ADC input KEY and signals..

6.1.1-h. Provide the DDC1/2B/2B+ interface to PC system or auto-alignment system.

The serial E2PROM ICC02 (24LC08) memory device to reserve the fixed monitor parameters, the factory alignment result, the user adjusting result, the user defined timing characteristics, ..., etc. While is only readable and optional to change the preset timing modes and/or their ID/name displayed on the OSD.

The propose of the voltage monitor circuit composed by DC01,RC05,CC04 is to keep the MCU working normal when the supply voltage is unstable. It is done by resetting the MCU while the supply voltage drops.

6.2. High Voltage Control Circuit

High Voltage Control Circuit is working basically by using switching theory with the main component ICB01 (TDA4856).

6.2.1. Circuit operating theory is explained as following:

6.2.1-a. When Power ON and the Vcc DC level of pin6 of ICB01 (TDA4856) exceeding 0.6V, ICB01 starts to work and the oscillate frequency is decided by RB25,RB26,CB10.

6.2.1-b. When ICB01 is working normally the output square wave of pin4 ***as figure S1*** will turn on QG03. The ON/OFF cycle of QG03 will make the primary of FBT (pin 1 ~2) acted like a Switching Power X'FMR ***as figure S2.***

6.2.1-c. AFC signal ***as figure S6*** is feed via RB01 to synchronize the oscillator of ICB01. Then, the high voltage will be always synchronized with horizontal deflection.

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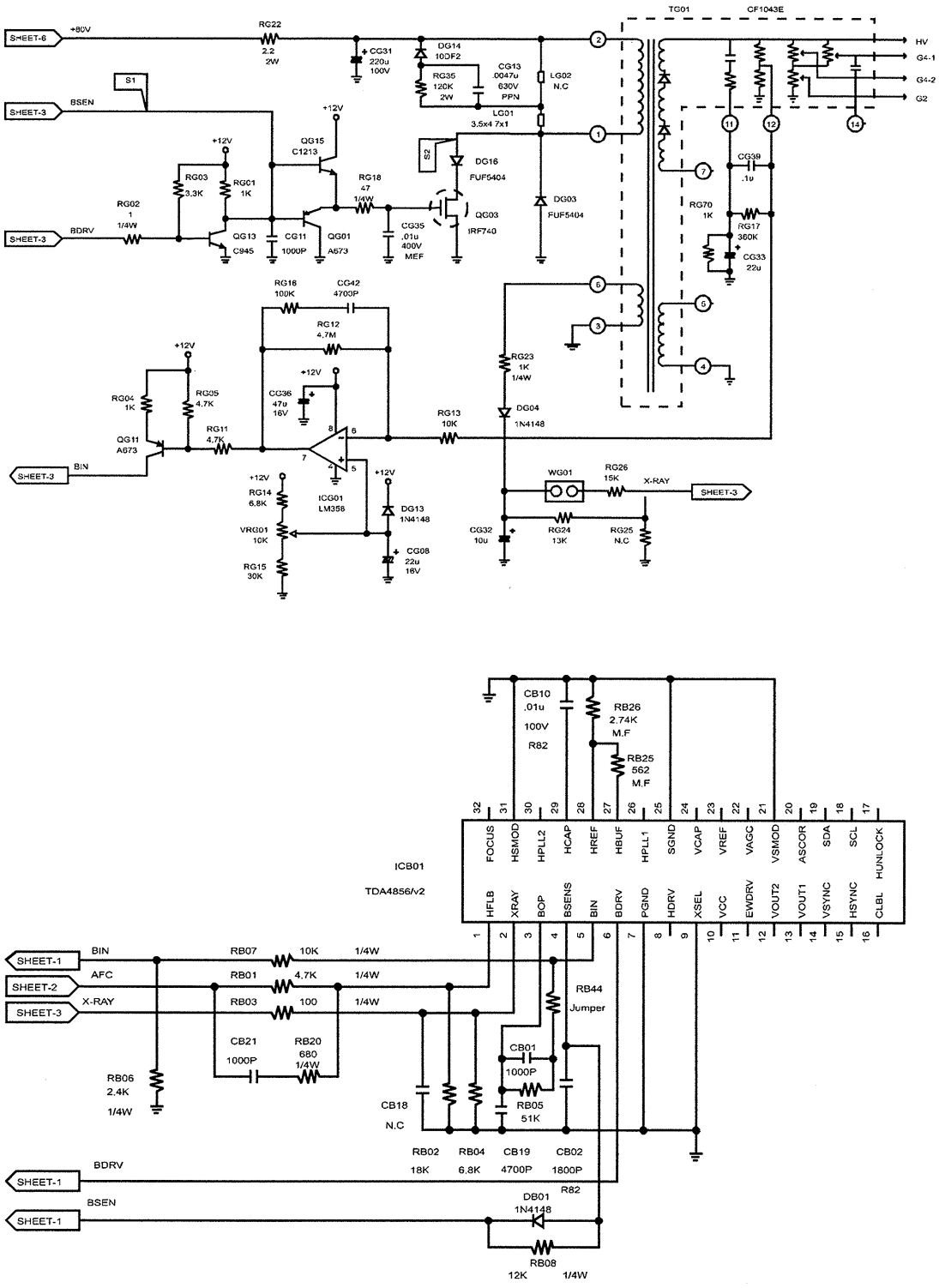
6.2.1-d. Usually loading change will cause unstable condition, so a high voltage feed back system is designed to maintain the stability of the high voltage circuit. This feed back system is started from voltage sensor on the pin11 of the FBT. The sensed voltage compares with the reference voltage on pin 5 of ICG01 and the difference is amplified then feed back to ICB01 to keep the HV stable.



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6.2.2. LM358 OP2 is controlled by following factors:

6.2.2-a. A feed back reference voltage circuit that consists of RG14, VRG01, and RG15 to adjust the high voltage.

6.2.2-b. When horizontal deflection is no function, there is no sensed current on TH02 and no voltage on CH07 (A1). Then ICG02 will pull down high voltage to protect CRT. After H-deflection circuit start to work properly, A1 voltage increases gradually and the output of ICG02 will become high to release the reference voltage of HV circuits. Then HV will raise up softly due to CG08.

6.3. X-RAY High Voltage Protection CKT

X-RAY High Voltage Protection CKT is to get a DC level voltage by utilizing the output waveform of FBT's pin6 to pin3 (GND) via a rectifier consists of DG04, CG32. This DC level voltage inputs to the pin2 (X-RAY) of ICB01 TDA4856. The preset X-RAY protection voltage is 6.4 volts. If the high voltage is higher than the preset voltage, the DC level voltage input into the pin2 will also be higher than 6.4 volts to make the pin8 of ICB01 off. It also means the HD signal is off, then horizontal deflection is off and the high voltage is also off.

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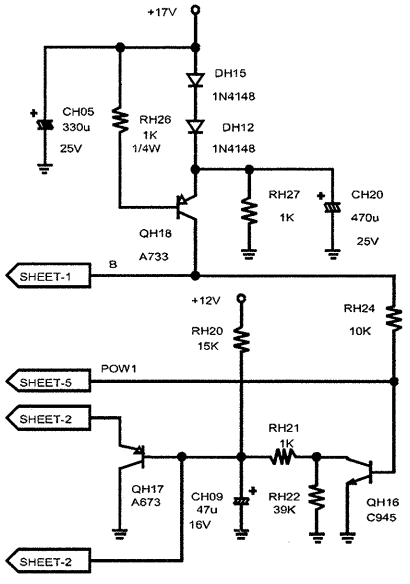
6.4. Soft-Start & Power Off Protection CKT & Suspend Control CKT



6.4.1. Soft-Start:

During the instant period of power on, unstable condition of horizontal deflection will easily damage components. So, Soft-Start is designed to control such an unstable condition.

When power on, during the period that 12 volts increases from 0 volts to 12 volts, the DC level of QH17 is controlled by RC Constant circuit RH20 and CH09.

QH17 controls the level at pin5 of ICH01 LM555. The width of the duty cycle at pin3 of ICH01 LM555 will be gradually increased. Till the CH09 is fully charged, QH17 is off is not working.

6.4.2. Power Off Protection CKT:

In order to turn off the B+ of horizontal deflection when power is off, QH18 are designed to meet the purpose.

When power off, the 17 volts decreases and the base level of QH18 is dropped. So QH18 is still on.

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6.4.3. Suspend Control CKT:

When entering Suspend Mode will send out a high level on POW1 to make:

6.4.3-a. QH16 is on and CH09 is discharge through QH16, then QH17 is on turns ICH01 and H-deflection B+ off. Since CH09 is discharge through QH16, the Soft-Start works when B is low level.

6.4.3-b. When H-deflection is turned off. A1signal will shut down HV circuit as described in sec. 6.2.2-b.

When monitor is from suspend back to normal mode, A1 is low level B and QH16 are off. The output is back to normal when CH09 makes Soft-Start worked and ICH01 is not controlled by QH17. So, Horizontal deflection and high voltage work normally.

6.5. Video-Amplifier/On-Screen-Display

The video amplifier system consists of the Pre-Amplifier, the Video-Power-Amplifier, and the Cutoff-Voltage-Adjusting circuits.

6.5.1. The functions of the Pre-Amplifier ICV01(TDA4887) include:

6.5.1-a. The small signal video amplifier controlled by MCU via I2C bus for the features of contrast (main gain control), output DC level 3 sub gain controls (R-Gain, G-Gain, B-Gain), clamping pulse source (AFC) and the clamping pulse width.

6.5.1-b. The OSD mixer processes the OSD-BI, OSD-RI, OSD-GI on Pin2, 3, 4 and the OSD BKG input on Pin1 and the OSD contrast is controlled by MCU via I2C bus.

The Video-Power-Amplifier ICV02 is a 3-channel hybrid-IC which functions as a cascade type transistor amplifier to reach the high bandwidth performance.

The Cutoff-Adjusting circuit consist of ICV06, QV04, QV05, QV06 is to provide the function of dark/background white-balance control by varying the peak voltages on the CRT cathodes. (Only R, G, B guns)

ICV05 (D1642) serving as the OSD generator outputs the R, G, B, FBKG signals that contain the information by which the MCU shows the monitor's status and the user adjusting indications. The R, G, B, FBKG signals are synchronized by the horizontal and vertical deflection sync input on Pin5 and Pin10. The MCU controls the OSD via the signals SDA, SCL on pin7,8.

*(the schematic diagram refer to **the sheet 7 of the Schematic section**)*

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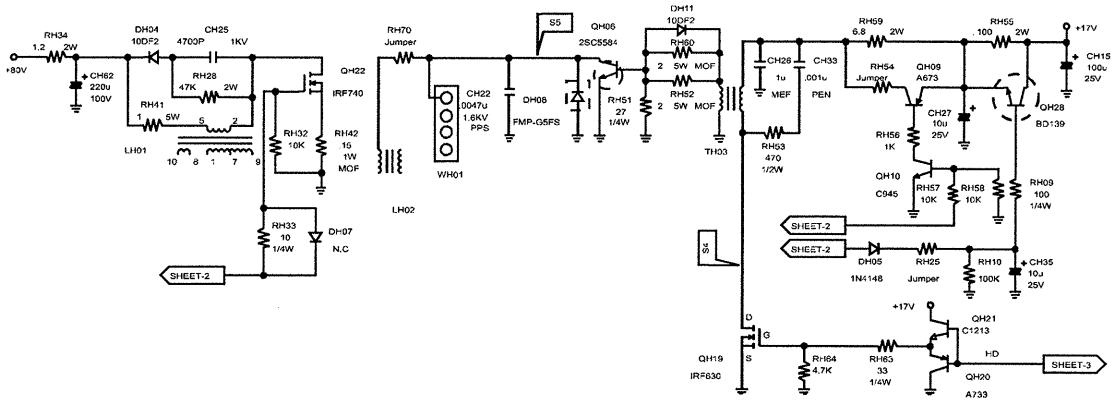
6.6. Horizontal Deflection Driving Circuit



6.6.1. HD signal ***as figure S3*** is output from pin8 of ICB01 TDA4856 and through QH20 and QH21 to drive QH19 IRF630 and TH03. ***Refer to figure S4***

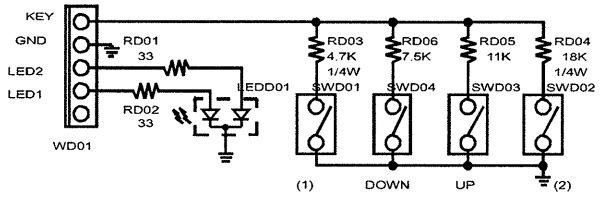
6.6.2. TH03 controls the driving current via DH05, CH35, QH28 and related circuits.

6.6.2-a. ICC01 H/2 control the reference voltage via QH10.

6.6.3. Through above items a and utilizing TH03 to drive QH06, the LC oscillation circuit that consists of defection coil CH22 and DH08 works. ***Refer to figure S5***

6.7. Display Circuit

The display board includes the LED driving circuit (MCU controlled by LED1 and LED2 to drive, key detecting circuit (SWD01, SWD02, SWD03, SWD04 to MCU ADC input).



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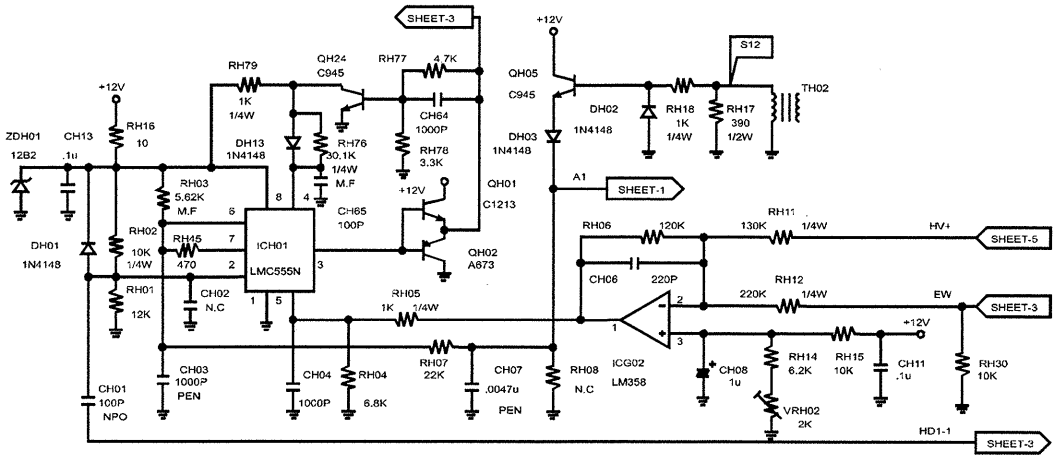
6.8. Horizontal Deflection B+ Control Circuit



6.8.1. ICH01 Trigger circuit:

ICH01 is via RH03, RH45, RH07 and CH03 to get RC oscillation. The frequency is decided by the trigger at pin2. The pin5 controls the duty width of output waveform. ICH01 Trigger CKT is mainly controlled by the following:

6.8.1-a. Trigger composite circuit: Signal ***as figure S3*** is composition of HD via QH20 and QH21. HD is square waveform.

6.8.1-b. Reference voltage waveform: ICG02 OP1 controls it.

6.8.1-c. Trigger output circuit: OP1 combines above circuit.

6.8.2. Operating description:

6.8.2-a. At the power on moment, the horizontal deflection is not working, so the trigger signal HD is differentiated .by CH01 and RH01, then feed to pin2 of ICH01. QH17 controls pin5 of ICH01 and make the output duty width at pin3 of ICH01 increased gradually and drive QH22 via TH01. ***Refer to figure S8.***

6.8.2-b. After QH22's driven, the B^+ ***as figure S9*** is output to LH02 and the horizontal deflection starts operation.

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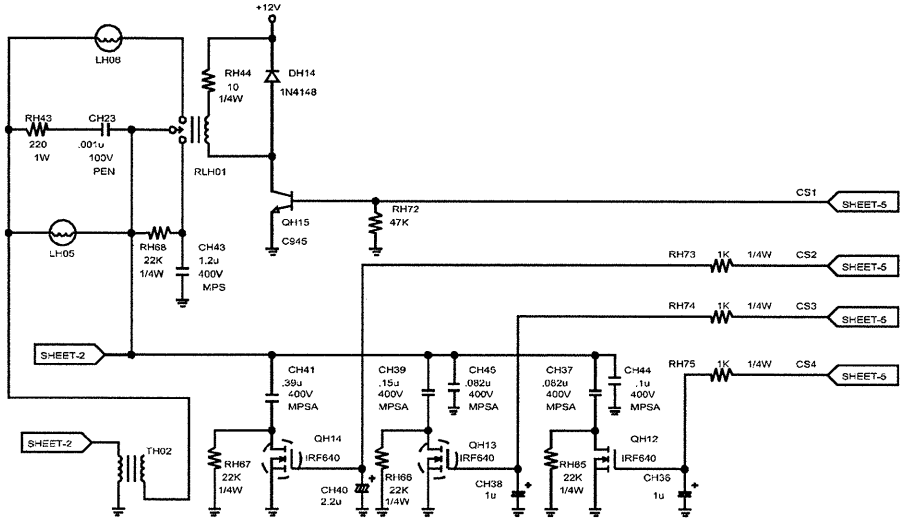
6.8.2-c. The horizontal deflection works steadily after above 1 to 3 steps are completed.

6.8.2-d. ICH01 LM555 is a mono stable oscillator. In high frequency, the trigger Duty may be double triggered and makes the output frequency dropped when the trigger Duty is smaller than the output Duty width, thus there is no enough B^+ for horizontal deflection. In order to have enough B+ and precise output Duty in the high frequency, QH01/QH02 output is differentiated via CH64, RH77 and RH78 and triggers QH24 to limit the output Duty at pin4 of ICH01. ***Refer to figure S7***

6.9. Horizontal Linearity Compensation Circuit



This circuit is designed to minimize the horizontal linearity variations in different horizontal frequency. There are two parts in this circuit:

6.9.1. Inductance compensation circuit:

The main component is LH06 (Linearity coil). The compensation circuit consists of QH15.

6.9.2. Capacitance compensation circuit:

CH44 is Cs capacitors. QH13 controls CH39, QH14 controls CH41. QH12 controls CH37 **ICC01 NT68P62** pin29 (CS4), pin28 (CS3), pin27(CS2) and pin26(CS1) controls QH13, QH12 and QH14 respectively. So, different frequency has different combination to meet the requirement.

For example: When frequency is 31KHz, ICC01 makes CS1~CS4 in high level. Thus, QH13 and QH15 Drain-Source is on to make the Cs capacitance equal to CH45+CH44+CH39+CH41=0.082μF+0.1μF+0.39μF+1.2μF+0.15μF+0.082uF=2.004μF.

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6.10. H-Size Pincushion Control CKT

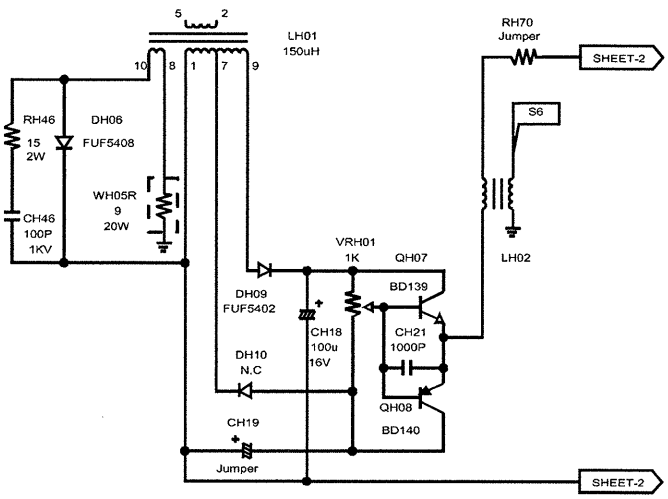
H-Size & Pincushion are used to control B+ that will change the horizontal deflection amplitude. To control B^{+}, the amplitude at ICH01 pin5 and the Duty width at ICH01 pin3 have to be changed. So ICH01 pin5 connects the control CKT that consists of ICG02 OP1. The reference level and waveform are mixed by ICG02 and send to ICH01 pin5.

6.10.1. VRH02 is mainly to preset the H-Size of each mode, and ICC01 pin31 is to change each specified mode.

6.10.2. In the Pincushion control, a parabolic waveform ***as figure S13*** is from pin11 EWDRV of ICB01 TDA4854 and into ICG02 OP1 to create a output parabolic waveform. ***as figure S14***

6.11. H-Center Control Circuit

H-Center is designed to adjust the Raster's center position by using the secondary current of LH01. This current is rectified through DH09, CH18 and to generate a DC current that will through the adjustment of RH38, VRH01 and RH39. Finally, the current is through the emitter follower, QH07 and QH08, and into LH02 to increase and decrease the horizontal deflection current.



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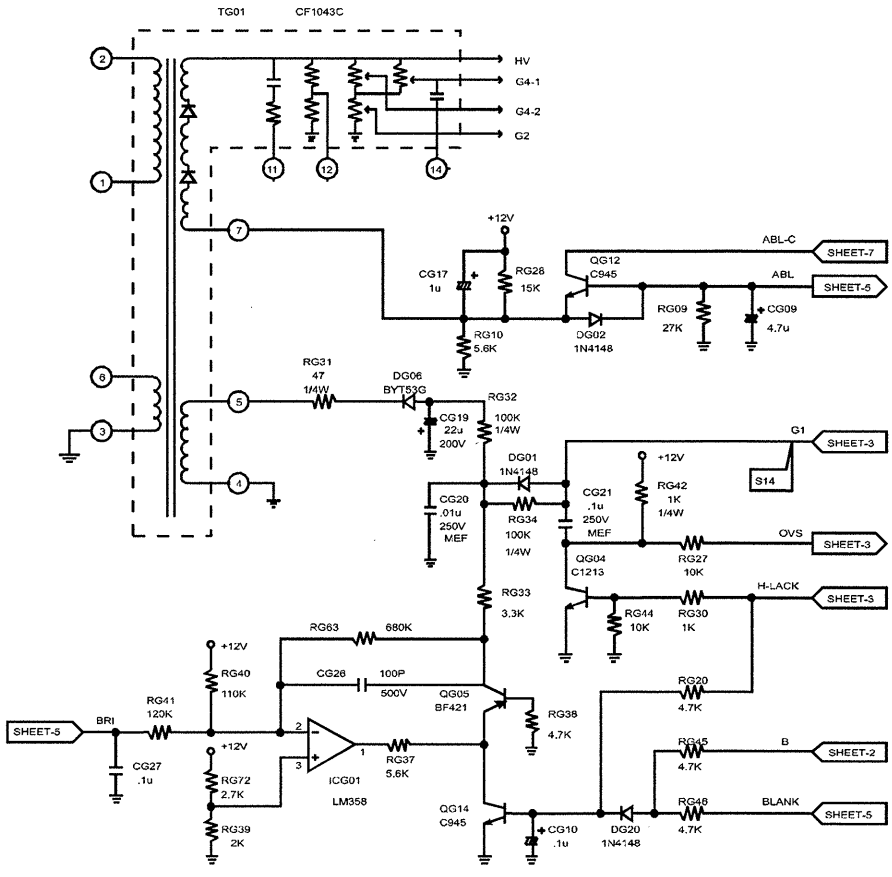
6.12. Brightness Blanking Reset Control CKT



Change the Brightness level by controlling the G1.

6.12.1. In normal working condition, the G1 waveform is synchronized with the vertical sync waveform ***as figure S12***. Since the purpose is to blank the vertical flyback scanning line when vertical is flyback, so the HLACK vertical deflection waveform through RG44, QG04 is used to control it.

6.12.2. Brightness control is via the control at pin30 of ICC01 (NT68P62) pin30 and through the control at ICG01(LM358) OP1 and QG05 to control the DC level of G1.

6.12.3. When frequency is changed, the pin22 Blank of ICC01 will output a high level to RG46,DG20 to make QG14 on. In the same time, thus QG05 off and to get G1 voltage -180V and to blank the screen. After the frequency changed, the pin22 of ICC01 will output a low Level to make QG14 OFF. In the same time, QG05 is not controlled by the pin22 of ICC01 and the Brightness control works normally.

6.12.4. When mode changes from power on to suspend, B will output a high level to make QG14 and QG03 on. QG05 base has positive signal to make QG05 off, to get G1 -180V and to blank the screen.

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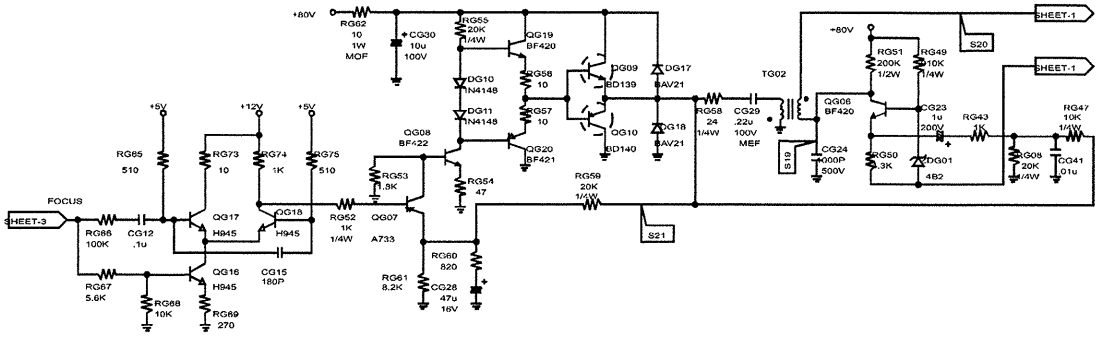
6.13. Focus CKT

Dynamic Focus is used to get perfect focusing of each dot on the screen.



6.13.1. There are H-Focus and Focus (H and V):

6.13.1-a. Focus(H) ***as figure S18***: ICB01 pin32(Focus) outputs a parabolic waveform and through RG52 and QG07 into QG08 to get a reverse amplified waveform. This waveform is via the emitter follower, QG09 and QG10, as a current gain then input into TG02.

6.13.1-b. Focus(V) ***as figure S16***: ICB01 pin32 outputs a parabolic waveform. This Waveform is amplified by QG06 and input into TG02.

6.13.1-c. Focus (H and V) are into TG02 to get a combined output waveform that will input to FBT pin9.

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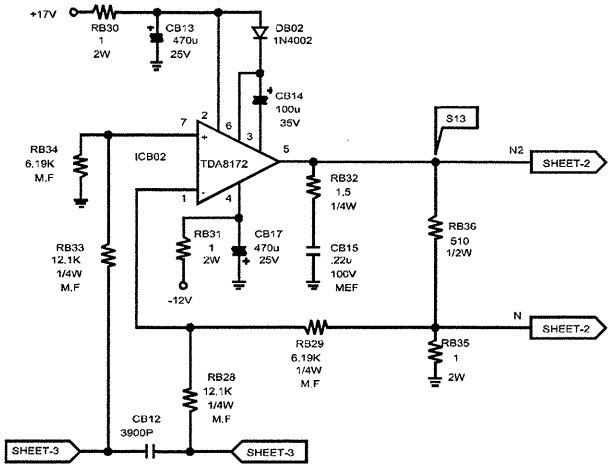
6.14. Vertical Deflection CKT



6.14.1. Vertical deflection Saw-tooth waveform is provided by ICB01 pin12 (VOUT2) and amplified by TDA8172.

6.14.2. A voltage multiplier, connected to pin3 and pin6, consists of DB02 and CB21 is designed to avoid flyback scanning line appeared during the vertical flyback period.

6.14.3. ICB01 pin13 (VOUT1) provides a DC level to CB05, RB23, bCB06 as a V-Position control voltage. As long as pin13 DC level changed, V-Position is also changed.

6.14.4. Vertical Deflection Wave ***as figure S11***

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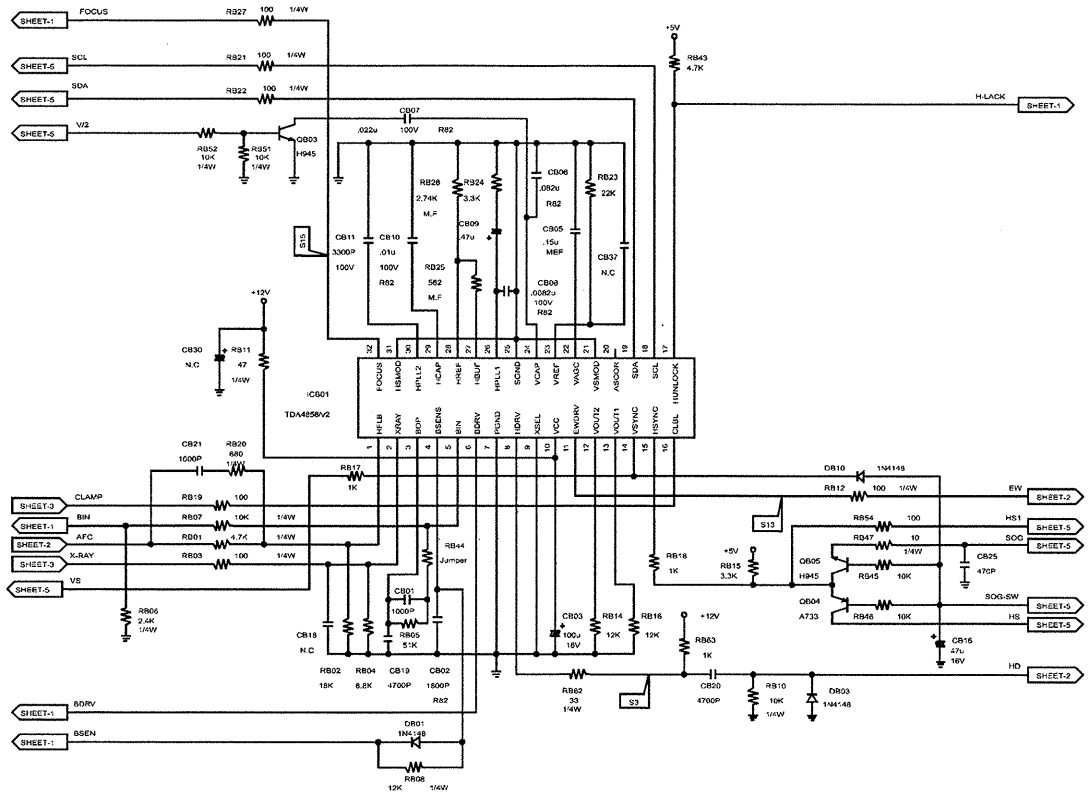
6.15. TDA4856 Circuit

The ICB01 (TDA4856) acts as a key component processing small signals for deflection circuits. The functions of TDA4856 include:



6.15.1. Synchro Processor

6.15.1-a. Capability to accept separate H/V(pin15, pin14) which could be selected by MCU via I2C control(pin18,19).

6.15.1-b. Status register with sync polarity, existence, locking states could be read by MCU via I2C.

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6.15.2. Horizontal part:

6.15.2-a. Wide self-locking range with 25 to 121KHz of HPLL1 to lock the HD frequency to H-sync input. The values of RB25(pin27) and CB09,RB27(pin28) decides the free run frequency(25KHz)

6.15.2-b. The H-phase control by MCU via I2C is also done at the HPLL1 stage.

6.15.2-c. The HPLL2 (pin30) locks the horizontal deflection via AFC (pin1) and provides the functions of dynamic phase controls(Pin-Balance and Parallelogram, internal) control by MCU via I2C.

6.15.2-d. The I2C controlled Focus of Amplitude is output on pin32 and amplified to compensate the horizontal dynamic focus.

6.15.3. Vertical part:

6.15.3-a. The DC voltage of the V-ramp is output on pin12, 13 to ICB02 to be the reference voltage of the amplifier.

6.15.3-b. Vertical parabola generator with I2C controlled amplitude, keystone, S-curve and cupid-bow output on pin31 to the horizontal deflection CKT to compensate the pincushion-like distortion.

6.15.3-c. Focus output on pin32 to be amplified to compensate the vertical dynamic focus.

6.15.3-d. Internal geometry tracking with V-Pos and V-Amp.

6.15.4. Others

6.15.4-a. HUNLOCK status on pin17 to protect H deflection CKT.

6.15.4-b. X-ray protection input on pin2.

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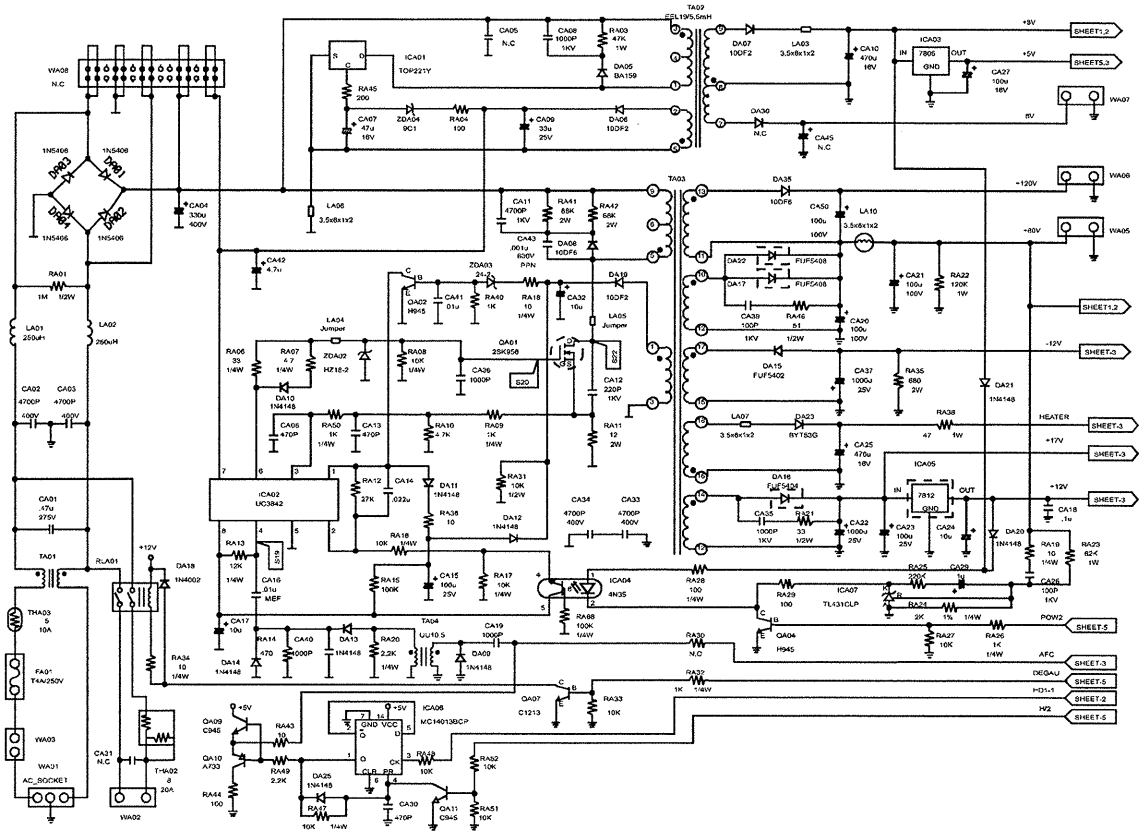
6.16. Power Supply Working Theory



ICA01 and ICA02 consist of a Current Mode Switch Power Supply and provides +80V, +70V, +5V, +17V, -12V and Heater voltage.

6.16.1-a. ICA01 and TA02 are auxiliary power source. ICA01 consists of PWM and Power MOS with an internal oscillate frequency 100KHz and combines with TA02 to provide +5V output. The +17V is through TA02 pin2 and rectified by DA07 to provide ICA02 working voltage and is fed back through ZDA02 into pin C to get a stable output voltage.

6.16.1-b. ICA02, QA01 and TA03 are main power source. ICA02 uses PWM to drive QA01 and TA03 to generate each output voltage. The output voltage is fed back via +80V to ICA07 TL431, then coupled to ICA02 pin 2 via ICA04 4N35 to make +80V stable. TA04 accepts AFC signal to make Power Supply's working frequency synchronized with the horizontal frequency.

6.16.1-c. ZDA03 and DA12 consist of the over-voltage protection circuit.

6.16.1-d. When output voltage is much higher than normal value or the feed back voltage is abnormal, in order to get protection, the output at pin9 of TA03 raises to the level that ZDA03 is on to trigger QA12 that makes ICA02 pin1 grounded.

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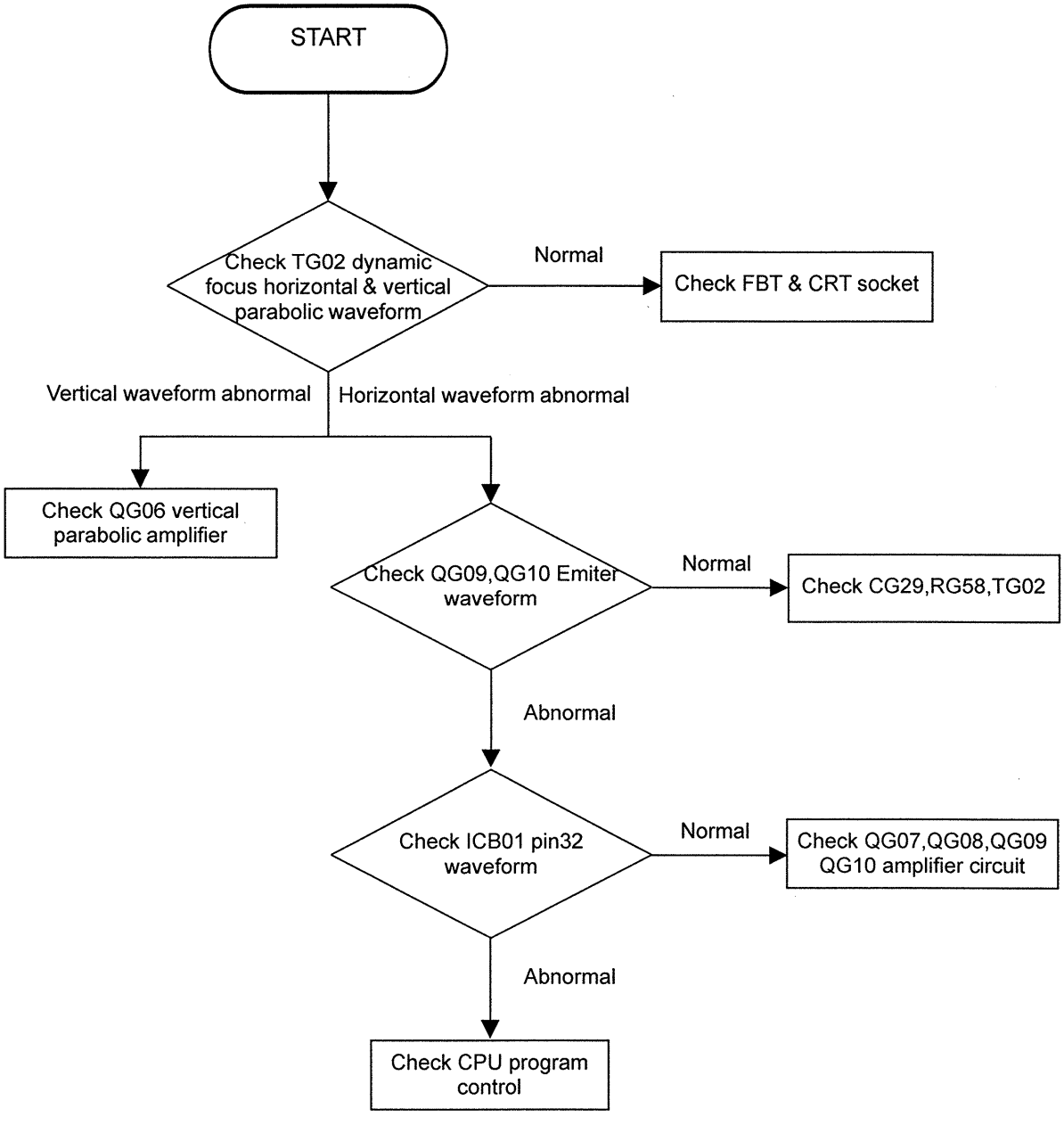
Chapter 7 Trouble Shooting

7.1. Dynamic Focus Failure



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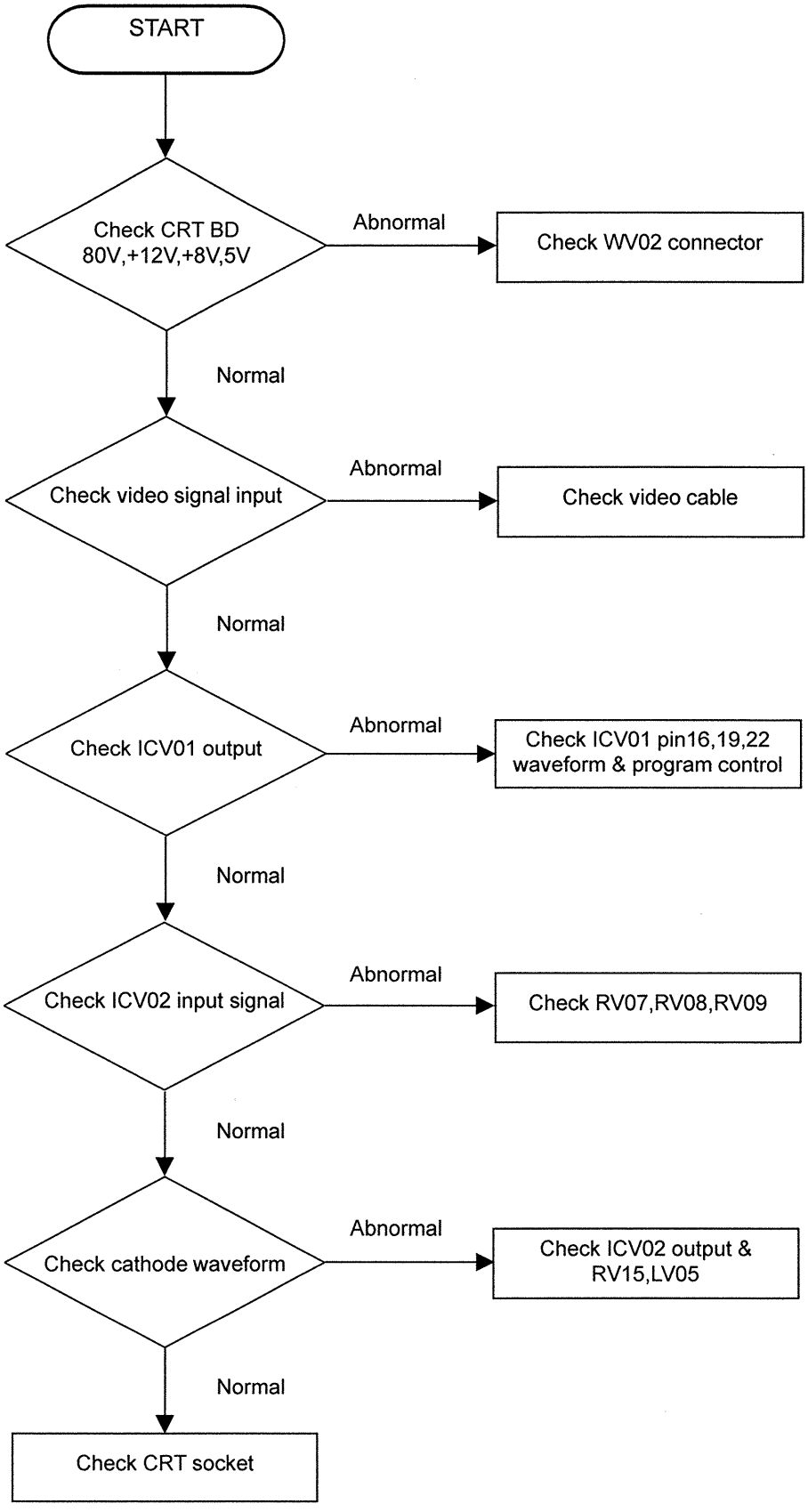
7.2. Video Does Not Appear



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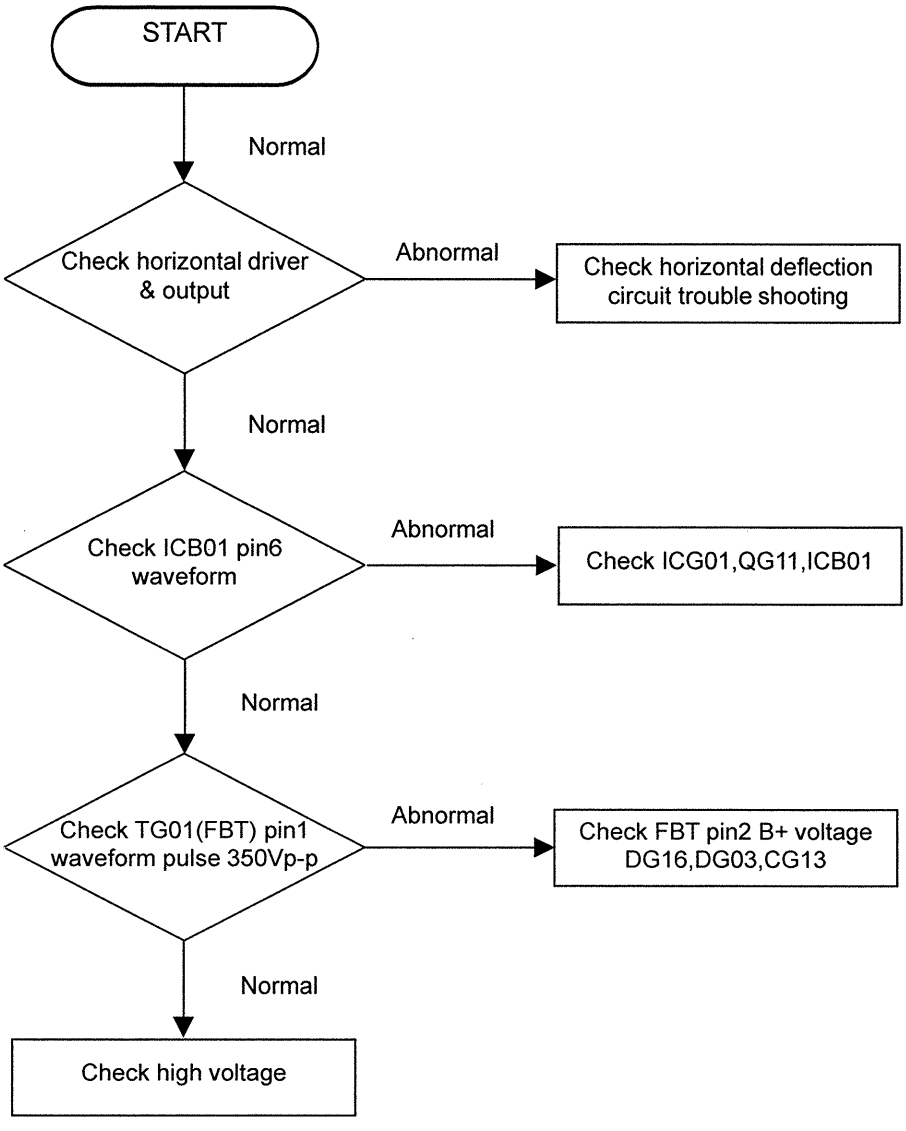
7.3. High Voltage Generator Failure



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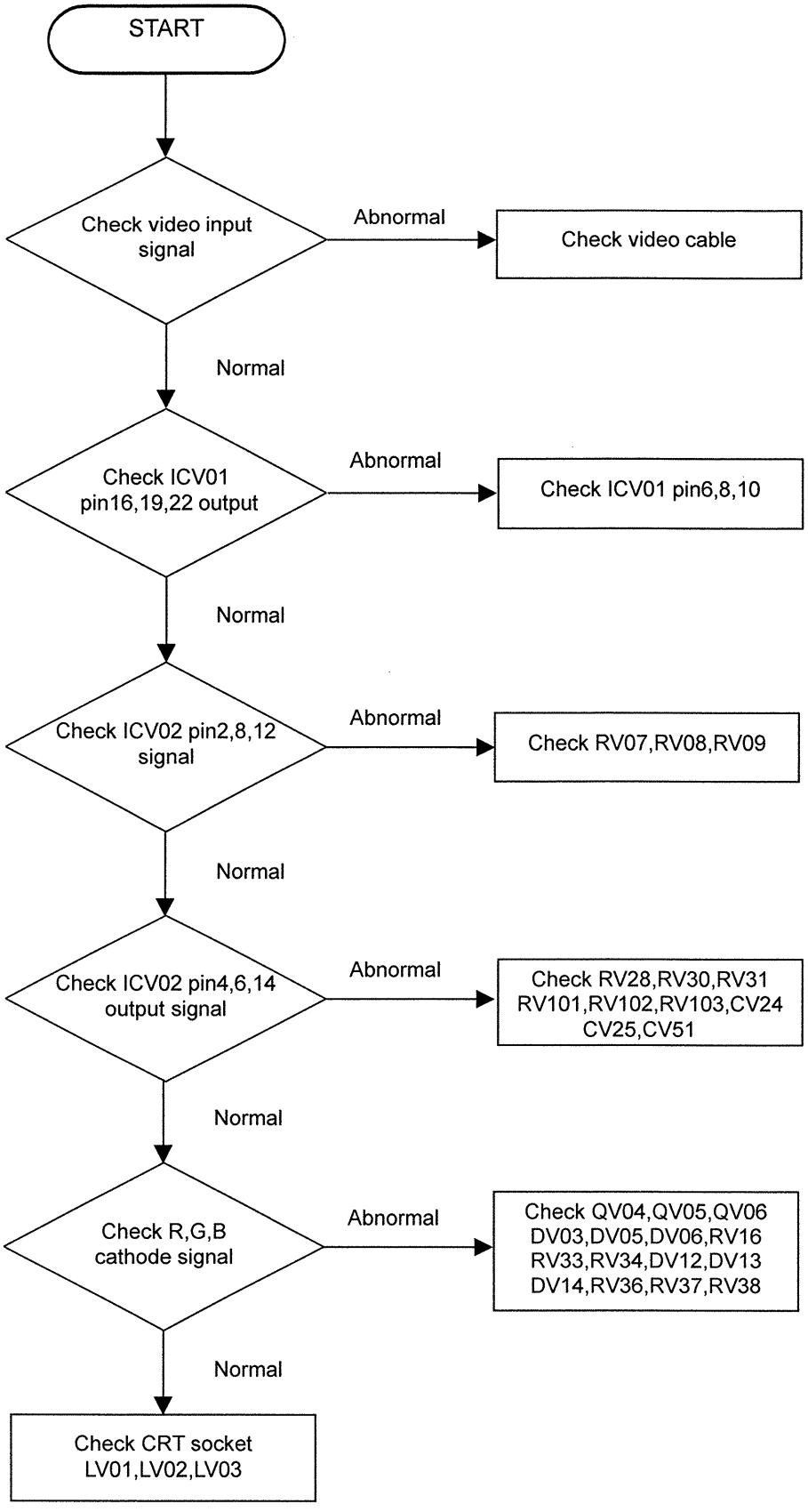
7.4. Video No R, G, B Color



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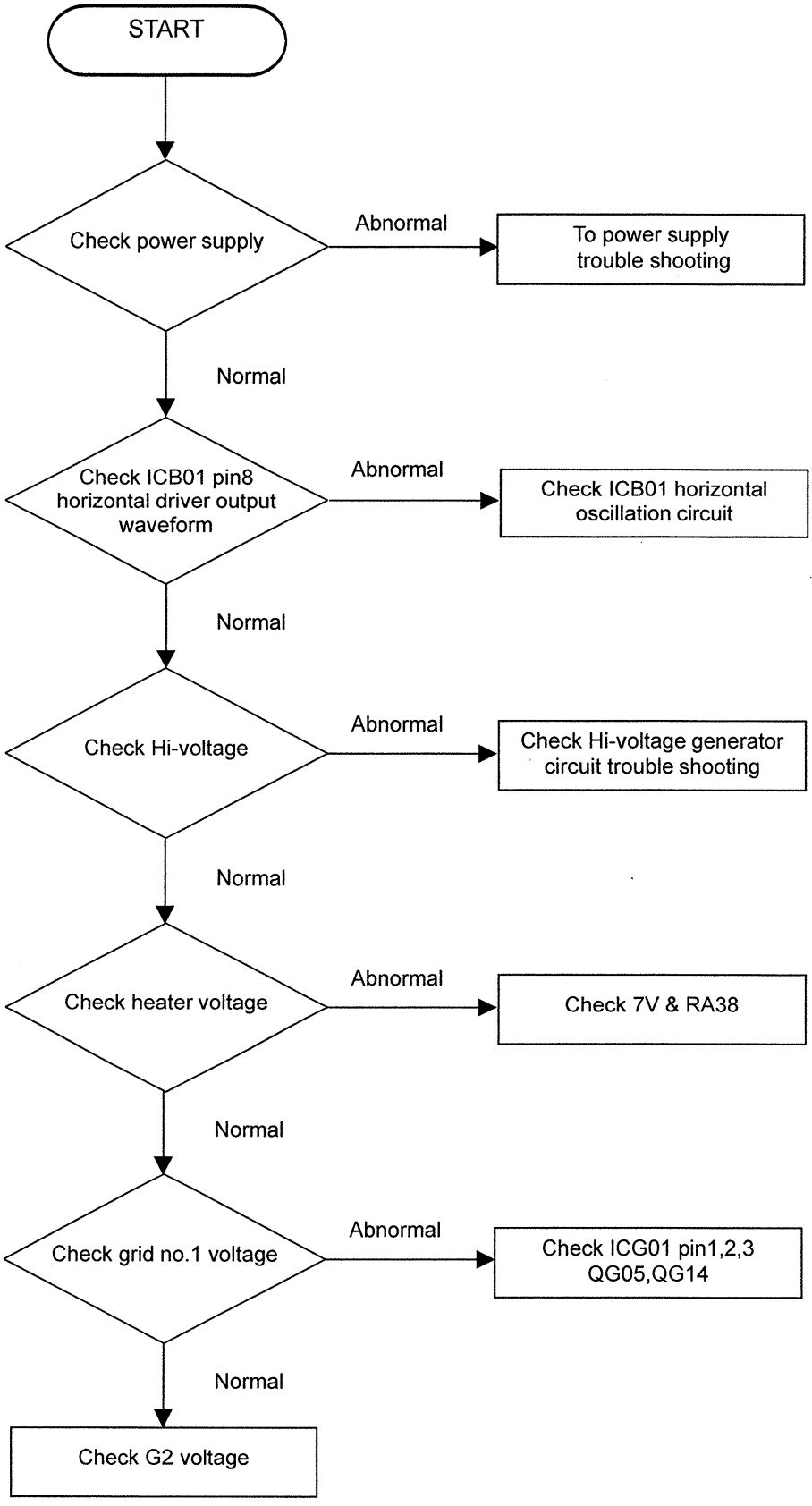
7.5. Raster Does Not Appear



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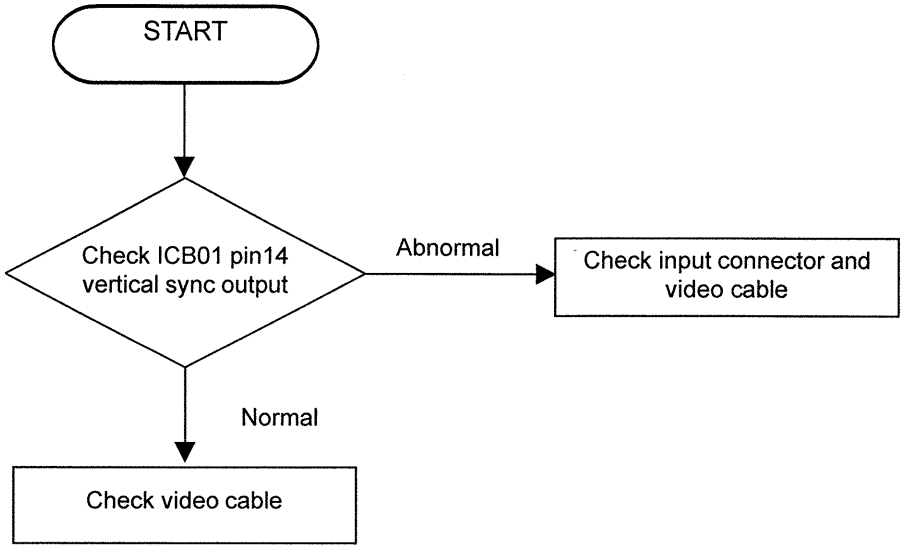
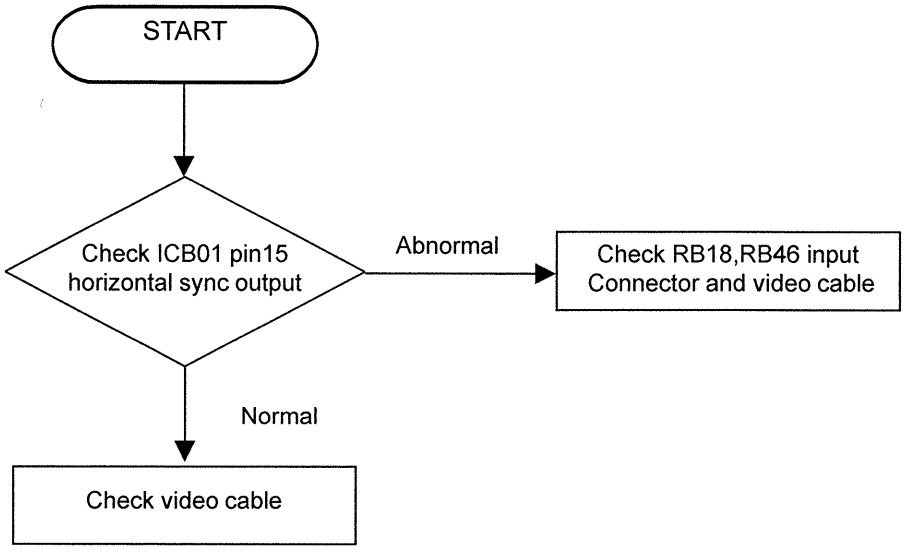
7.6. Vertical Synch Failure



7.7. Horizontal Synch Failure



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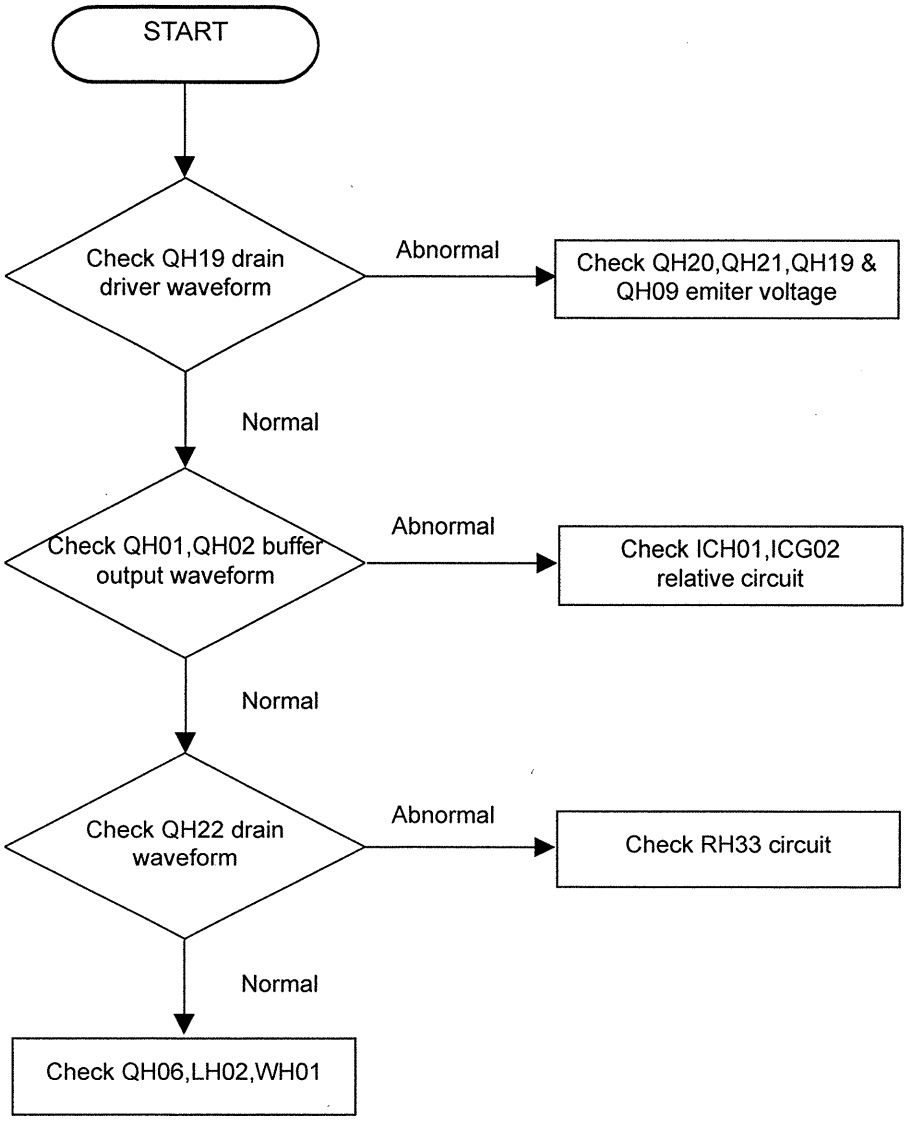
7.8. Horizontal Deflection Failure



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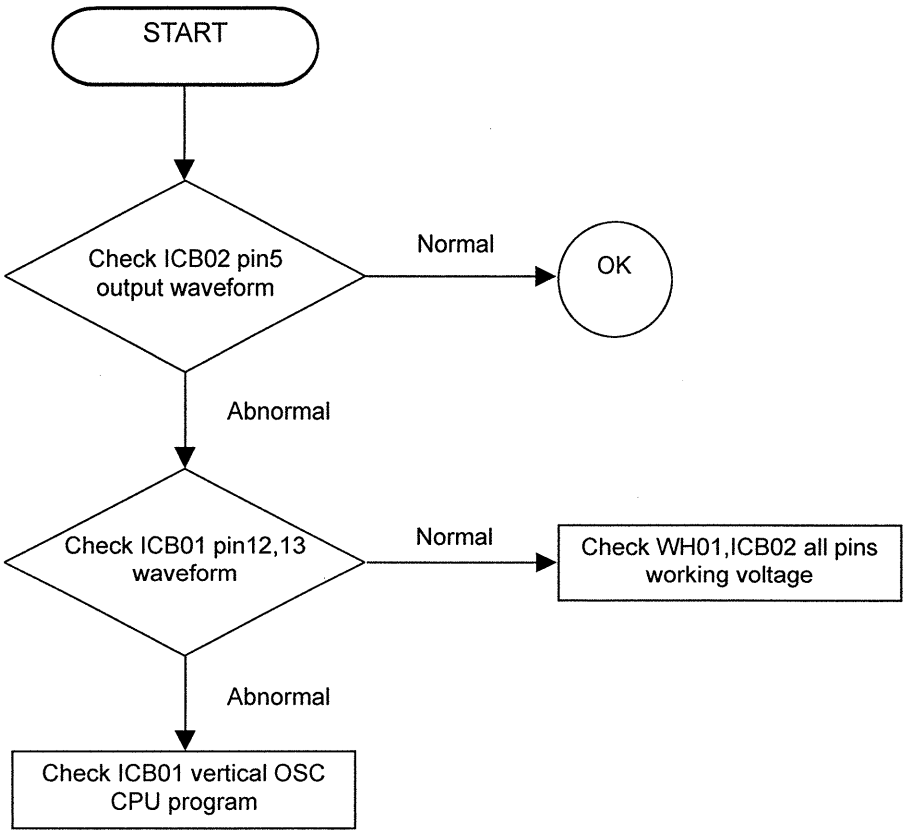
7.9. Single Horizontal Line



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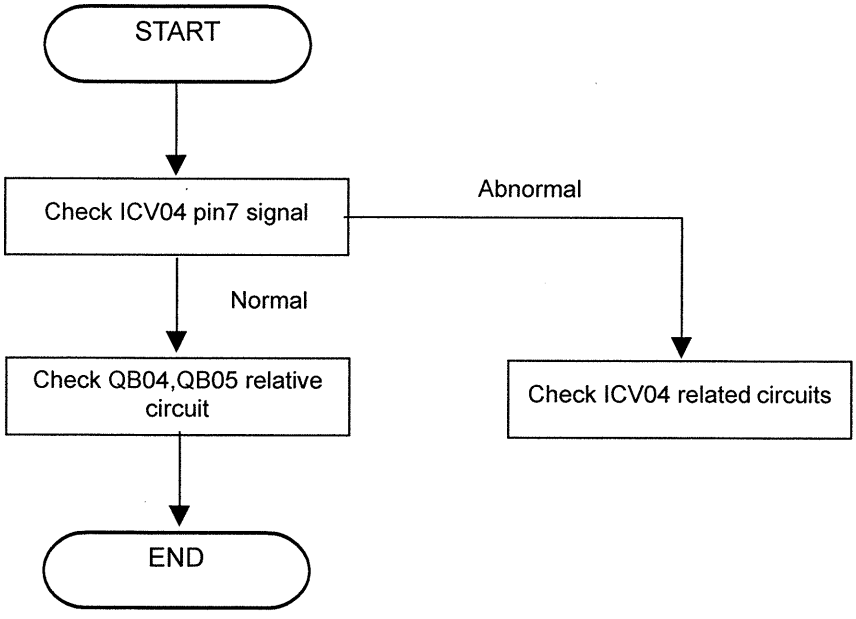
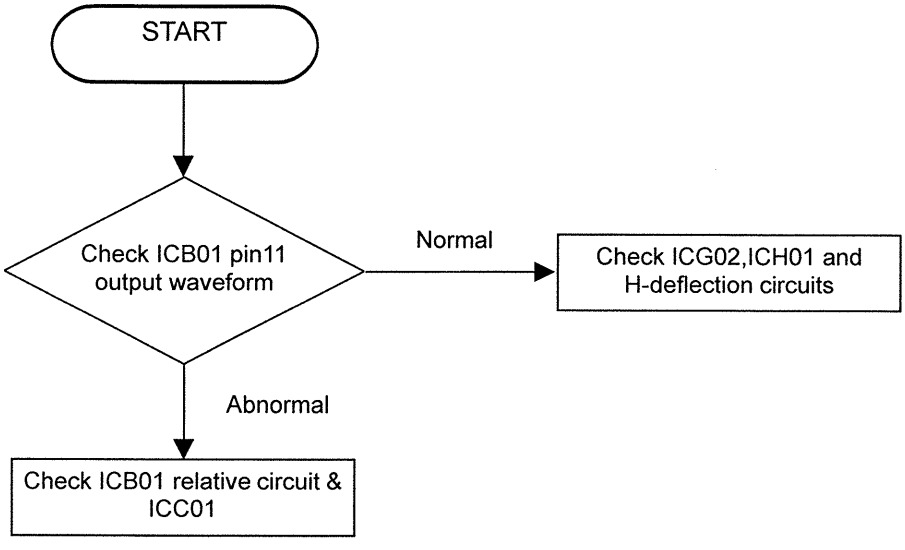
7.10. Sync On Green Does Not Work



7.11. Pincushion & Distortion



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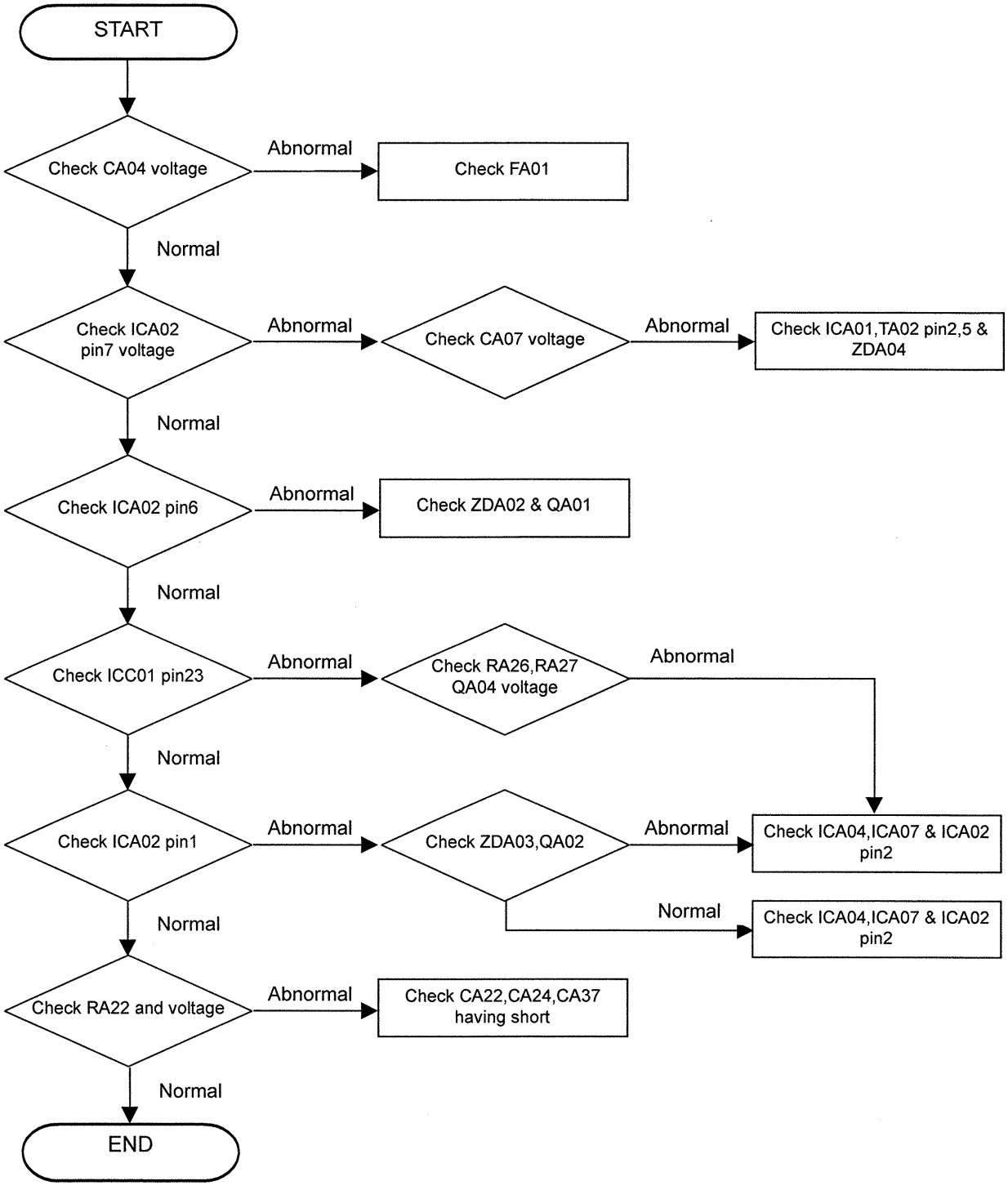
7.12.No Voltage Output



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Chapter 8 Alignment Process

8.1. Factory Adjust Procedure

Input timing:1280x1024 (H=91K,V=85Hz)

Pattern: Cross-Hatch

8.1.1. Turn ON the monitor with the **[2]** key keeping pressed for more than 4 seconds to enter the **Preset-Adjust mode**. (There should be an '**P**' at the top-bottom corner of the **On-Screen-Display**).

8.1.2. E2PROM Initial Procedure:

8.1.2-a. Use the OSD controls to enter the " E2PROM INI ", and toggle it (push the [2] key)

8.1.2-b. Press button [1] toggle to the e2prom initial operation

8.1.2-c. Press button [2] toggle to exit control

8.1.3. Touch Heat Sink of **DA17** to make Voltage = **80±2V**

8.1.4. Adjust **VRG01** to make **CRT High-Voltage** = **27.5KV**

8.1.5. Preset **"H-SIZE"** to 60% then adjust **VRH02** to make **H-Size** = **380±3** mm

8.1.6. Adjust VRH01 to make H-Center (raster) ±3 mm

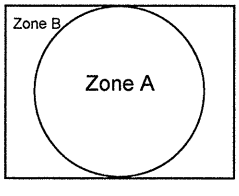
8.1.7. Short **WG01** to make **X-Ray** Protection and Restart the monitor in **Preset-Adjust mode**

8.1.8. Use the **On-Screen-Display Controls** to adjust the "**H-Position**" ,"**V-Size**", "**V-Position**", "**Pincushion**", "**Trapezoid**", "**Parallel**", "**P-Balance**", "**Rotation**", "**VLinr-Sym**", "**VLinr-Center**", **"Top-Hooking", "Bottom-Hooking**" to meet the **Spec**.:

- H-Position: ± 1.5mm
- V-Size: 285 ± 1.5mm
- V-Position: ± 1.5mm
- Pincushion: ≤ 1.5mm
- Trapezoid: ≤ 1.5mm
- Parallel: ≤ 1.5mm
- P-Balance: ≤ 1.5mm
- Rotation: ≤ 1.5mm

8.1.9. Jitter - Not allowed (Viewed at 45 cm)

8.1.10. Misconvergence -Zone A: 0.25mm; Zone B: 0.35mm



380x285mm

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8.2. Factory Preset Data Adjust Procedure

Input timing: see attached
Pattern: Cross-Hatch

8.2.1. Turn ON the monitor with the **[2]** key keeping pressed for more than 4 seconds to enter the **Preset-Adjust mode**. (There should be an '**P**' at the top-left corner of the **On-Screen-Display**).

8.2.2. For each timing list on attached table (except primary one <1280x1024 H=91K, V=85Hz), use the **On-Screen-Display Controls** to adjust the "**H-Size**", "**H-Position**"(video), "**V-Size**", "**V-Position**", "**Pincushion**", "**Trapezoid**", "**Parallel**", "**P-balance**", to meet the Spec.:

- H-Size: 380± 1.5mm
- H-Position: ± 1.5mm
- V-Size: 285 ± 1.5mm
- V-Position: ± 1.5mm
- Pincushion: ≤ 1.5mm
- Trapezoid: ≤ 1.5mm
- Parallel: ≤ 1.5mm
- P-Balance: ≤ 1.5mm

8.3. Color Adjust Procedure

Input timing: 1280 x 1024 (H=91K,V=85Hz)
Pattern: Center Block/Full White

8.3.1. Turn ON the monitor with the **[2]** key keeping pressed for more than 4 seconds to enter the **Preset-Adjust mode**. (There should be an '**P**' at the top-left corner of the **On-Screen-Display**).

8.3.2. Cut Off Adjust:

8.3.2-a. Use the **OSD Controls** to adjust the "**CONTRAST**" to **min**.(00), "**BRIGHTNESS**" to **max**.(100), "**SUB-BRI**" to 50

8.3.2-b. Enter the "**VIEWMATCH COLOR**" submenu of the **OSD Control**

8.3.2-c. Select the "**VIEWMATCH COLOR**" and toggle it (push the Function key) to **CUTOFF**

8.3.2-d. Preset the **RED,GREEN,BLUE** to 0

8.3.2-e. Adjust the **RED,GREEN,BLUE** to obtain color temperature **X=0.283±0.010,Y=0.297±0.010**

8.3.2-f. Adjust **G2 voltage** to obtain raster **BRIGHTNESS** about ≤ **0.5FL.**

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8.3.3. Color Temperature Adjust:

8.3.3-a. Use the **OSD Controls** to adjust the "**BRIGHTNESS**" to **50**, then the "**CONTRAST**" to **100.**

8.3.3-b. Toggle the "**VIEWMATCH COLOR**" to **9300°K**

8.3.3-c. Preset the **RED,GREEN,BLUE**

8.3.3-d. Adjust the **RED,GREEN,BLUE** to obtain color temperature **X=0.283±0.010,Y=0.297±0.010**

8.3.3-e. Repeat **step b,c,d** to adjust color temp. **6500K (X=0.313±0.015,Y=0.329±0.015)** and **5000°K (X=0.346±0.015,Y=0.359±0.015)**

8.3.4. White Luminance Adjust

8.3.4-a. Center Block White Luminance:

- Use the **OSD Controls** to adjust the "**CONTRAST**" to **100** , "**BRIGHTNESS**" to **50, "ABL" to 50**
- Toggle the "**VIEWMATCH COLOR**" to **9300°K**
- Adjust the **"SUB-CONT"** to make the center block 42±2 FL

8.3.4-b. Full While Luminance:

- Use the **OSD Controls** to adjust the "**CONTRAST**" to **100** to, then the "**BRIGHTNESS**" to **50**
- Toggle the "**VIEWMATCH COLOR**" to **9300°K**
- Adjust the "**ABL**" to obtain luminance output 30±2 FL in the full white pattern

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Chapter 9 Spare Parts List

ITEM	LOCATION	PART NO.	DESCRIPTION	REMARK
1	DA17	0390-3004-8022	FAST DIODE FUF5408 T	
2	DG06	0390-3003-2052	FAST DIODE BYT53G T	
3	DG17	0390-5000-9132	GEN. DIODE BAV21 T	
4	DH06	0390-3004-8022	FAST DIODE FUF5408 T	
5	DH08	0390-2000-2180	DAMPER DIODE FMP-G5FS N-F	
6	ICA01	0430-4004-0230	IC TOP221Y TO-220 3PIN	
7	ICA02	0430-7000-3107	IC UC3842 DIP 8PIN	
8	ICA04	0430-7000-1110	IC 4N35 DIP 6PIN	
9	ICB01	0430-4005-2109	IC TDA4856/V2 SDIP 32PIN	
10	ICB02	0430-4001-7107	IC TDA8172 DIP 7PIN	
11	ICC01	0430-5005-5102	IC AMTRAN V21-1 V1.0 6862-50032 DIP 40PIN	
12	ICG01	0430-4000-1104	IC LM358 DIP-8	
13	ICV01	0430-4006-1409	IC TDA4887 SDIP 24PIN	
14	ICV02	0430-4004-3114	IC VPS16 DIP 15PIN	
15	ICV05	0430-7003-9141	IC D1642 DIP 16PIN V3.0	
16	QA01	0420-1002-0508	POWER MOS 2SK956 TO-3P (800V 9A)	
17	QG03	0420-1001-5401	POWER MOS IRF740 TO-220	
18	QG05	0410-4000-2111	TRANSISTOR BF421 TO-92 T	
19	QG06	0410-4000-1111	TRANSISTOR BF420 TO-92 T	
20	QG08	0410-4000-3105	TRANSISTOR BF422 TO-92 T	
21	QG09	0410-3000-3306	TRANSISTOR 2SD669AC TO-126	
22	QG10	0410-1000-1306	TRANSISTOR 2SB649AC TO-126	
23	QH06	0410-2001-5516	TR NPN 2SC5584 1500V 20A TOP-3	
24	QH14	0420-1000-2407	POWER MOS IRF640 TO-220	
25	QH19	0420-1000-1401	POWER MOS IRF630 TO-220	
26	QH22	0420-1001-9401	POWER MOS IRF740 TO-220 3PIN	
27	QH28	0410-6000-1311	TRANSISTOR BD139 TO-126	
28	RLH01	0251-1210-0016	RELAY 1POLES 240V/10A/12 Vdc DT	
29	ZDA02	0400-1751-2000	ZENER 18-2 17.5-18.3 1/2W	
30		0320-2400-0010	POWER CORD 6ft 100V T-MARK	J model only
31		0320-3400-0010	POWER CORD 6ft 220V VDE	E model only
32		0320-3400-0020	PC POWER CORD 6ft 220V VDE	-P/-A model
33		0320-4400-0010	POWER CORD 6ft 110V UL/CSA AL	-M/-E model
34		0320-5000-0010	POWER CORD 6ft 220V SAA	A model only
35		0321-0400-0060	S.CABLE 1800mm 15(3R-3R) 3+6C / PC99	
36		1701-0105-8010	BEZEL GS815 G7397 PC+ABS	
37		1701-0202-2000	BACK COVER G7397 PC+ABS	
38		1925-1000-0460	POLYLON TOP RIGHT GS815	
39		1925-1000-0470	POLYLON BOTTOM GS 815	
40		1925-1000-0630	POLYLON TOP LEFT GS815	
41		1925-1200-1540	CARTON VIEWSONIC GS815	-M/-E model
42		1925-1200-1970	CARTON GS815 -P	-P/-J/-A model
43		1925-1300-1640	MANUAL VIEWSONIC GS815	M model only
44		1925-1300-1960	MANUAL GS815 -E	E model only
45		1925-1300-1970	MANUAL GS815 -P	-P/-J/-A model
46		3017-0142-0156	ASS'Y DISPLAY BD	
47		3021-0062-0160	ASS'Y MAIN/PWR/CTRL BD GS815	
48		3021-0062-0301	BASE(USB) ASS'Y G7397 PC+ABS	
49		3021-0122-0151	ASS'Y VIDEO BD GS815 (ICV02: VPS16)	

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Chapter 10 Critical Parts List

ITEM	LOACTION	PART NO	DESCRIPTION	REMARK
1		0210-0210-1353	CRT 21" M51LQV183X48 (A) HIT. .25mm	
2	ASCH05	0330-2100-0320	DEGAUSSING 21" 19.6ohm 0.5x90Ts	
3	CA01	0122-0474-2702	P/C X2 0.47uF 275V K B	
4	CA02	0122-1472-4000	D/C Y 4700PF 400V M N-F	
5	CA03	0122-1472-4000	D/C Y 4700PF 400V M N-F	
6	CA04	0101-1331-4003	E/C GEN. 330uF 400V 85' S	
7	CA33	0122-1472-4000	D/C Y 4700PF 400V M N-F	
8	CA34	0122-1472-4000	D/C Y 4700PF 400V M N-F	
9	FA01	0180-4402-5201	FUSE T-L 250V 4A 5x20 GLASS	
10	ICA04	0430-7000-1110	IC 4N35 DIP 6PIN	
11	LA01	0360-1000-0010	RING CORE L:250uH 4A	
12	LA02	0360-1000-0010	RING CORE L:250uH 4A	
13	QA01	0420-1002-0508	POWER MOS 2SK956 TO-3P (800V 9A)	
14	RA01	0130-1004-1250	RES. CF 1.0Mohm 1/2W J A	
15	RLA01	0252-1250-2012	RELAY 2POLES 250V/5A/12Vdc DT	
16	TA02	0350-0419-0030	X'FMR EEL19 5.5mH AT1099DA	
17	TA03	0350-0242-0090	X'FMR EE4215 105uH (21" & 22")	
18	TA04	0353-0600-0010	X'FMR SYNC UU 10.5 1.75-1.75mH	
19	TG01	0480-0000-0100	F.B.T. 26.5KV 3000PF (CF1043E)	
20	WA01	0262-0000-0012	AC SOCKET 0714C PCB TYPE	
21	WA02	0451-1000-0294	WAFER 10mm 2P WHITE	

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Chapter 11 Parts List

11.1. 2021-1210-7235 21" COLOR MONITOR GS815

ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
1	1P11	1925-1000-0460	POLYLON TOP RIGHT GS815	1
2	1P12	1925-1000-0470	POLYLON BOTTOM GS815	1
3	1P13	1925-1100-0301	PE BAG 1000Lx558Wx0.04t EUROPE	1
4	1P15	1925-1000-0630	POLYLON TOP LEFT GS815	1
5	1P31	1925-1200-1540	CARTON VIEWSONIC GS815	1
6	ASMO01	3021-0062-0301	BASE(USB) ASS'Y 170105054010	1
7	ASMO03	3021-0092-0303	CHASSIS ASS'Y GS815	1
8	BC01	1701-0202-2000	BACK COVER GS815 PC+ABS D-SUB ONLY	1
9	BC04	1701-1000-0100	PLASTIC FOOT / GL-24H	2
10	BC05	1724-2304-1402	SCREW,BBC,M4.0x14L,Zn-Cc	8
11	BC07	1947-1500-1400	SPONGE 75Lx75Wx55T	1
12	BC08	1936-1000-0070	V.SONIC MYLAR-PLATE	1
13	BZ17	1936-1000-0060	V.SONIC LOGO-B (AL. PLATE)	1

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11.2. 3017-0142-0156 DISPLAY BD

ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
1	LEDD01	0440-5000-0020	LED L-59GYW 5	1
2	PCB5	0170-1740-0120	PCB DISPLAY BD V0 118x36x1.6t PT775	1
3	RD01	0130-3309-1850	RES. CF 33ohm 1/8W J A	1
4	RD02	0130-3309-1850	RES. CF 33ohm 1/8W J A	1
5	RD03	0131-4751-1410	RES. MF 4.75Kohm 1/4W F A	1
6	RD04	0130-1802-1450	RES. CF 18Kohm 1/4W J A	1
7	RD05	0130-1102-1850	RES. CF 11Kohm 1/8W J A	1
8	RD06	0130-7501-1850	RES. CF 7.5Kohm 1/8W J A	1
9	SWD01	0220-7020-0167	SW TACTILE 6*6mm 4P	1
10	SWD02	0220-7020-0167	SW TACTILE 6*6mm 4P	1
11	SWD03	0220-7020-0167	SW TACTILE 6*6mm 4P	1
12	SWD04	0220-7020-0167	SW TACTILE 6*6mm 4P	1
13	WD01	0460-1104-0040	WH XH4P-SCN4P 1007#24 230mm	1

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11.3. 3019-0022-0159 DIODE OPTION BD P95f, P220f, P225f

ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
1	D01	0390-3004-8022	FAST DIODE FUF5408 T	1
2	D02	0390-3004-8022	FAST DIODE FUF5408 T	1
3	PCB8	0171-1641-0070	PCB OPTION FR4 30x60mmx1.0t D	1
4	R01	0133-0228-0252	RES. MOF(M) 0.22ohm 2W J A-FK	1
5	R02	0133-0228-0252	RES. MOF(M) 0.22ohm 2W J A-FK	1

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11.4. 3021-0062-0150 MAIN/PWR/CTRL BD

ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
1	CA01	0122-0474-2702	P/C X2 0.47uF 275V K B	1
2	CA02	0122-1472-4000	D/C Y 4700PF 400V M N-F	1
3	CA03	0122-1472-4000	D/C Y 4700PF 400V M N-F	1
4	CA04	0101-1331-4003	E/C GEN. 330uF 400V 85' S	1
5	CA06	0111-1471-5112	C/C DISK 470PF 50V Y5P F-K	1
6	CA07	0101-1470-1211	E/C GEN. 47uF 16V 105' F	1
7	CA08	0111-1102-1312	C/C DISK 1000PF 1KV Y5P F-K	1
8	CA09	0101-1330-1311	E/C GEN. 33uF 25V 105' F	1
9	CA10	0101-1471-1211	E/C GEN. 470uF 16V 105' F	1
10	CA10H	0242-1025-2004	HEAT S-T 10.0*0.25 20mm 125'	1
11	CA11	0111-1472-1322	C/C DISK 4700PF 1KV Z5U F-K	1
12	CA12	0111-1221-1312	C/C DISK 220PF 1KV Y5P F-K	1
13	CA13	0111-1471-5112	C/C DISK 470PF 50V Y5P F-K	1
14	CA14	0111-1223-5122	C/C DISK 0.022uF 50V Z5U F-K	1
15	CA15	0101-1101-1311	E/C GEN. 100uF 25V 105' F	1
16	CA16	0120-5103-0531	P/C MEF 0.01uF 50V J F-K (T)	1
17	CA17	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
18	CA18	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
19	CA19	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	1
20	CA20	0101-1101-2012	E/C GEN. 100uF 100V 105' K	1
21	CA21	0101-1101-2012	E/C GEN. 100uF 100V 105' K	1
22	CA22	0101-1102-1312	E/C GEN. 1000uF 25V 105' K	1
23	CA23	0101-1101-1311	E/C GEN. 100uF 25V 105' F	1
24	CA24	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
25	CA25	0101-1471-1211	E/C GEN. 470uF 16V 105' F	1
26	CA26	0111-2101-1312	C/C DISK 100PF 1KV SL F-K	1
27	CA27	0101-1101-1211	E/C GEN. 100uF 16V 105' F	1
28	CA29	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	1
29	CA30	0111-1471-5112	C/C DISK 470PF 50V Y5P F-K	1
30	CA32	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
31	CA33	0122-1472-4000	D/C Y 4700PF 400V M N-F	1
32	CA34	0122-1472-4000	D/C Y 4700PF 400V M N-F	1
33	CA35	0111-1102-1312	C/C DISK 1000PF 1KV Y5P F-K	1
34	CA36	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	1
35	CA37	0101-1102-1312	E/C GEN. 1000uF 25V 105' K	1
36	CA39	0111-2101-1312	C/C DISK 100PF 1KV SL F-K	1
37	CA40	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	1
38	CA41	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	1
39	CA42	0101-1479-1511	E/C GEN. 4.7uF 50V 105' F	1
40	CA43	0120-3102-6331	P/C PPN 0.001uF 630V J F-K	1
41	CA50	0101-1101-2012	E/C GEN. 100uF 100V 105' K	1
42	CB01	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	1
43	CB02	0121-2182-1032	P/C R82 1800PF 100V J B	1
44	CB03	0101-1101-1211	E/C GEN. 100uF 16V 105' F	1
45	CB05	0120-5154-0531	P/C MEF 0.15uF 50V J F-K	1
46	CB06	0121-2823-1032	P/C R82 0.082uF 100V J B	1
47	CB07	0121-2223-1032	P/C R82 0.022uF 100V J B	1
48	CB08	0121-2822-1032	P/C R82 0.0082uF 100V J B	1
49	CB09	0101-1478-1511	E/C GEN. 0.47uF 50V 105' F	1
50	CB10	0120-5103-0531	P/C MEF 0.01uF 50V J F-K (T)	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
51	CB11	0121-2332-1032	P/C R82 3300PF 100V J B	1
52	CB12	0111-1332-5112	C/C DISK 3300PF 50V Y5P F-K	1
53	CB13	0101-1471-1311	E/C GEN. 470uF 25V 105' F	1
54	CB14	0101-1221-1412	E/C GEN. 220uF 35V 105' K	1
55	CB15	0120-5224-1031	P/C MEF 0.22uF 100V J F-K	1
56	CB16	0101-1470-1211	E/C GEN. 47uF 16V 105' F	1
57	CB17	0101-1471-1311	E/C GEN. 470uF 25V 105' F	1
58	CB19	0111-1472-5112	C/C DISK 4700PF 50V Y5P F-K	1
59	CB20	0111-1472-5112	C/C DISK 4700PF 50V Y5P F-K	1
60	CB21	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	1
61	CC04	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
62	CC05	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
63	CC06	0101-1101-1211	E/C GEN. 100uF 16V 105' F	1
64	CC07	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
65	CC08	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
66	CC09	0101-1101-1211	E/C GEN. 100uF 16V 105' F	1
67	CC10	0111-2220-5102	C/C DISK 22PF 50V NPO F-K	1
68	CC11	0111-2220-5102	C/C DISK 22PF 50V NPO F-K	1
69	CC13	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
70	CC14	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
71	CC15	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
72	CC16	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
73	CC17	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
74	CC20	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
75	CC21	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
76	CC23	0111-2220-5102	C/C DISK 22PF 50V NPO F-K	1
77	CC25	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
78	CC27	0111-2680-5102	C/C DISK 68PF 50V NPO F-K	1
79	CC28	0111-2680-5102	C/C DISK 68PF 50V NPO F-K	1
80	CC39	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
81	CC40	0111-2101-5102	C/C DISK 100PF 50V NPO F-K	1
82	CC41	0111-2101-5102	C/C DISK 100PF 50V NPO F-K	1
83	CE03	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	1
84	CE04	0101-3109-1511	E/C N-P 1uF 50V 105' F	1
85	CE05	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
86	CE06	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
87	CE10	0101-1101-1311	E/C GEN. 100uF 25V 105' F	1
88	CE11	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	1
89	CE12	0101-3109-1511	E/C N-P 1uF 50V 105' F	1
90	CE13	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	1
91	CE14	0101-3109-1511	E/C N-P 1uF 50V 105' F	1
92	CE15	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	1
93	CE16	0101-3109-1511	E/C N-P 1uF 50V 105' F	1
94	CE18	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	1
95	CE20	0101-1101-1211	E/C GEN. 100uF 16V 105' F	1
96	CG08	0101-1220-1211	E/C GEN. 22uF 16V 105' F	1
97	CG09	0101-1479-1511	E/C GEN. 4.7uF 50V 105' F	1
98	CG10	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
99	CG11	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	1
100	CG12	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
101	CG13	0120-3472-6331	P/C PPN 0.0047uF 630V J F-K	1
102	CG15	0111-2181-5102	C/C DISK 180PF 50V NPO F-K	1
103	CG17	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	1
104	CG19	0101-1220-2212	E/C GEN. 22uF 200V 105' K	1
105	CG20	0120-5103-2531	P/C MEF 0.01uF 250V J F-K	1
106	CG21	0120-5104-4031	P/C MEF 0.1uF 400V J F-K	1
107	CG23	0101-1479-2211	E/C GEN. 4.7uF 200V 105' F	1
108	CG24	0111-1102-5212	C/C DISK 1000PF 500V Y5P F-K	1
109	CG26	0111-1101-5212	C/C DISK 100PF 500V Y5P F-K	1
110	CG27	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
111	CG28	0101-1470-1211	E/C GEN. 47uF 16V 105' F	1
112	CG29	0120-5224-1031	P/C MEF 0.22uF 100V J F-K	1
113	CG30	0101-1100-2011	E/C GEN. 10uF 100V 105' F	1
114	CG31	0101-1221-2012	E/C GEN. 220uF 100V 105'K	1
115	CG32	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
116	CG33	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
117	CG35	0120-5103-4033	P/C MEF 0.01uF 400V J F-K (Pitch:7.5mm)	1
118	CG36	0101-1470-1211	E/C GEN. 47uF 16V 105' F	1
119	CG39	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
120	CG41	0111-1103-5122	C/C DISK 0.01uF 50V Z5U F-K	1
121	CG42	0111-1472-5112	C/C DISK 4700PF 50V Y5P F-K	1
122	CH01	0111-2101-5102	C/C DISK 100PF 50V NPO F-K	1
123	CH03	0120-2102-0531	P/C PEN 0.001uF 50V J F-K (T)	1
124	CH04	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	1
125	CH05	0101-1331-1312	E/C GEN. 330uF 25V 105' K	1
126	CH06	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	1
127	CH07	0120-2472-0531	P/C PEN 0.0047uF 50V J F-K	1
128	CH08	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	1
129	CH09	0101-1470-1211	E/C GEN. 47uF 16V 105' F	1
130	CH10	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	1
131	CH11	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
132	CH13	0111-1104-5102	C/C DISK 0.1uF 50V Y5V F-K	1
133	CH15	0101-1101-1311	E/C GEN. 100uF 25V 105' F	1
134	CH18	0101-1101-1211	E/C GEN. 100uF 16V 105' F	1
135	CH19	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	1
136	CH20	0101-1471-1311	E/C GEN. 470uF 25V 105' F	1
137	CH21	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	1
138	CH22	0120-4472-9230	P/C PPS 0.0047uF 2KV J N-F	1
139	CH23	0120-2102-1031	P/C PEN 0.001uF 100V J F-K (T)	1
140	CH25	0111-1472-1322	C/C DISK 4700PF 1KV Z5U F-K	1
141	CH26	0120-5105-0531	P/C MEF 1.0uF 50V J F-K	1
142	CH27	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
143	CH30	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	1
144	CH33	0120-2102-0531	P/C PEN 0.001uF 50V J F-K (T)	1
145	CH35	0101-1100-1311	E/C GEN. 10uF 25V 105' F	1
146	CH36	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	1
147	CH37	0121-8823-4031	P/C MPSA 0.082uF 400V J F-K	1
148	CH38	0101-1109-1511	E/C GEN. 1.0uF 50V 105'F	1
149	CH39	0121-8154-4031	P/C MPSA 0.15uF 400V J F-K	1
150	CH40	0101-1229-1511	E/C GEN. 2.2uF 50V 105' F	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
151	CH41	0120-9394-4031	P/C MPS 0.39uF 400V J F-K	1
152	CH43	0120-9125-4031	P/C MPS 1.2uF 400V J F-K	1
153	CH44	0121-8104-4031	P/C MPSA 0.1uF 400V J F-K	1
154	CH45	0121-8823-4031	P/C MPSA 0.082uF 400V J F-K	1
155	CH46	0111-2101-1312	C/C DISK 100PF 1KV SL F-K	1
156	CH62	0101-1221-2012	E/C GEN. 220uF 100V 105'K	1
157	CH64	0111-1102-5112	C/C DISK 1000PF 50V Y5P F-K	1
158	CH65	0111-2101-5102	C/C DISK 100PF 50V NPO F-K	1
159	DA01	0390-5001-0202	GEN. DIODE 1N5406 T/B	1
160	DA02	0390-5001-0202	GEN. DIODE 1N5406 T/B	1
161	DA03	0390-5001-0202	GEN. DIODE 1N5406 T/B	1
162	DA04	0390-5001-0202	GEN. DIODE 1N5406 T/B	1
163	DA05	0390-3000-4022	FAST DIODE BA159 T	1
164	DA06	0390-3000-1012	FAST DIODE 10DF2 T	1
165	DA07	0390-3000-1012	FAST DIODE 10DF2 T	1
166	DA08	0390-3002-5012	FAST DIODE 10DF6 T	1
167	DA09	0390-5000-1052	GEN. DIODE 1N4148 T	1
168	DA10	0390-5000-1052	GEN. DIODE 1N4148 T	1
169	DA11	0390-5000-1052	GEN. DIODE 1N4148 T	1
170	DA12	0390-5000-1052	GEN. DIODE 1N4148 T	1
171	DA13	0390-5000-1052	GEN. DIODE 1N4148 T	1
172	DA14	0390-5000-1052	GEN. DIODE 1N4148 T	1
173	DA15	0390-3002-8022	FAST DIODE FUF5402 T	1
174	DA16	0390-3002-9022	FAST DIODE FUF5404 T	1
175	DA16H	1712-0600-0041	HEAT SINK (30Wx60Lx1.2T)	1
176	DA17	3019-0022-0159	ASS'Y OPTION BD P95f,P220f,P225f,AT320DB	1
177	DA18	0390-5000-3202	GEN. DIODE 1N4002F T	1
178	DA19	0390-3000-1012	FAST DIODE 10DF2 T	1
179	DA20	0390-5000-1052	GEN. DIODE 1N4148 T	1
180	DA21	0390-5000-1052	GEN. DIODE 1N4148 T	1
181	DA23	0390-3003-2052	FAST DIODE BYT53G T	1
182	DA25	0390-5000-1052	GEN. DIODE 1N4148 T	1
183	DA35	0390-3002-5012	FAST DIODE 10DF6 T	1
184	DB01	0390-5000-1052	GEN. DIODE 1N4148 T	1
185	DB02	0390-5000-3202	GEN. DIODE 1N4002F T	1
186	DB03	0390-5000-1052	GEN. DIODE 1N4148 T	1
187	DB10	0390-5000-1052	GEN. DIODE 1N4148 T	1
188	DC01	0390-5000-1052	GEN. DIODE 1N4148 T	1
189	DG01	0390-5000-1052	GEN. DIODE 1N4148 T	1
190	DG02	0390-5000-1052	GEN. DIODE 1N4148 T	1
191	DG03	0390-3002-9022	FAST DIODE FUF5404 T	1
192	DG04	0390-5000-1052	GEN. DIODE 1N4148 T	1
193	DG06	0390-3003-2052	FAST DIODE BYT53G T	1
194	DG10	0390-5000-1052	GEN. DIODE 1N4148 T	1
195	DG11	0390-5000-1052	GEN. DIODE 1N4148 T	1
196	DG12	0390-5000-1052	GEN. DIODE 1N4148 T	1
197	DG13	0390-5000-1052	GEN. DIODE 1N4148 T	1
198	DG14	0390-3000-1012	FAST DIODE 10DF2 T	1
199	DG16	0390-3002-9022	FAST DIODE FUF5404 T	1
200	DG17	0390-5000-9132	GEN. DIODE BAV21 T	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
201	DG18	0390-5000-9132	GEN. DIODE BAV21 T	1
202	DG20	0390-5000-1052	GEN. DIODE 1N4148 T	1
203	DH01	0390-5000-1052	GEN. DIODE 1N4148 T	1
204	DH02	0390-5000-1052	GEN. DIODE 1N4148 T	1
205	DH03	0390-5000-1052	GEN. DIODE 1N4148 T	1
206	DH04	0390-3000-1012	FAST DIODE 10DF2 T	1
207	DH05	0390-5000-1052	GEN. DIODE 1N4148 T	1
208	DH06	0390-3004-8022	FAST DIODE FUF5408 T	1
209	DH08	0390-2000-2180	DAMPER DIODE FMP-G5FS N-F	1
210	DH08S	1724-1703-0802	SCREW,PB,M3.0x8L,Zn-Cc	1
211	DH09	0390-3002-8022	FAST DIODE FUF5402 T	1
212	DH11	0390-6000-1012	SCHOTTKY DIODE 11DQ06 T	1
213	DH12	0390-5000-1052	GEN. DIODE 1N4148 T	1
214	DH13	0390-5000-1052	GEN. DIODE 1N4148 T	1
215	DH14	0390-5000-1052	GEN. DIODE 1N4148 T	1
216	DH15	0390-5000-1052	GEN. DIODE 1N4148 T	1
217	FA01	0180-4402-5201	FUSE T-L 250V 4A 5*20mm Glass 5ST4	1
218	FA011	0190-0000-0010	FUSE CLIP 5*20mm	2
219	FG01	0370-0000-0710	FERRITE CORE RH 16x17x9	1
220	FG02	0370-0000-0510	FERRITE CORE 17.5x28.5x9.5	1
221	FG02C	1701-1400-9800	WIRE SADDLE/ YJ98	1
222	G01	0460-2001-0092	WH 1015#18 320mm BLACK T/C	1
223	G03	0460-1701-0230	WH SRA4.3 1015#18 95mm	1
224	G11	0460-2001-0240	WH 1015#18 60mm BLACK	1
225	ICA01	0430-4004-0230	IC TOP221Y TO-220 3PIN	1
226	ICA02	0430-7000-3107	IC UC3842N DIP-8 Pin	1
227	ICA03	0430-6000-3210	IC MC7805CT TO-220 3 Pin	1
228	ICA04	0430-7000-1110	IC 4N35 DIP 6PIN	1
229	ICA05	0430-6000-5207	IC LM7812 TO-220 3 Pin	1
230	ICA05H	1712-0400-1400	HEAT SINK (23.5Wx16.5Tx25H)	1
231	ICA05S	1724-2603-0602	SCREW,BTCW,M3.0x6L,Zn-Cc	1
232	ICA06	0430-0000-2110	IC MC14013BCP DIP-14	1
233	ICA07	0430-6000-4310	IC TL431CLP TO-92 3PIN T	1
234	ICB01	0430-4005-2109	IC TDA4856/V2 SDIP 32PIN	1
235	ICB02	0430-4001-7107	IC TDA8172 DIP 7PIN	1
236	ICB02G	1712-0800-0100	LOCKING CABLE CLIPS / WC-3L	1
237	ICB02H	1712-0300-0082	HEAT SINK FOR (80W*39T*69H)	1
238	ICB02Q	1724-2603-1202	SCREW,BTCW,M3.0x12L,Zn-Cc	1
239	ICB02R	1701-1100-0801	SILICON RUBBER /TO1633(30)	1
240	ICB02S	1724-2603-0802	SCREW,BTCW,M3.0x8L,Zz-Cc	1
241	ICB02W	1701-0600-0200	TRANSISTOR COVER / TR-08	1
242	ICC01	0430-5005-5142	IC AMTRAN V21-1 V1.0 6862-50032 DIP 40PI	1
243	ICC01S	0201-2544-0000	IC SOCKET 2.54mm 40PIN	1
244	ICC02	0430-3000-4117	IC 24LC08B/P DIP 8PIN	1
245	ICE01	0430-4000-6104	IC LM324N DIP-14	1
246	ICG01	0430-4000-1104	IC LM358 DIP-8	1
247	ICG02	0430-4000-1104	IC LM358 DIP-8	1
248	ICH01	0430-3000-1115	IC TLC555CP DIP 8PIN	1
249	J001	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
250	J002	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
251	J004	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
252	J005	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
253	J007	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
254	J008	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
255	J009	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1
256	J010	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
257	J011	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
258	J012	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
259	J015	0230-7508-0000	JUMPER WIRE 7.5*0.6mm	1
260	J016	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
261	J017	0230-2259-0000	JUMPER WIRE 22.5x0.6mm	1
262	J018	0230-2259-0000	JUMPER WIRE 22.5x0.6mm	1
263	J019	0230-2259-0000	JUMPER WIRE 22.5x0.6mm	1
264	J020	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
265	J022	0230-1259-0000	JUMPER WIRE 12.5*0.6mm	1
266	J023	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
267	J024	0230-2259-0000	JUMPER WIRE 22.5x0.6mm	1
268	J025	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
269	J026	0230-2259-0000	JUMPER WIRE 22.5x0.6mm	1
270	J027	0230-2259-0000	JUMPER WIRE 22.5x0.6mm	1
271	J028	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
272	J029	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
273	J030	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
274	J032	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
275	J033	0230-7508-0000	JUMPER WIRE 7.5*0.6mm	1
276	J034	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1
277	J035	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1
278	J036	0230-2259-0000	JUMPER WIRE 22.5x0.6mm	1
279	J037	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
280	J038	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
281	J039	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
282	J040	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	1
283	J041	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
284	J042	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
285	J043	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
286	J044	0230-7508-0000	JUMPER WIRE 7.5*0.6mm	1
287	J045	0230-2259-0000	JUMPER WIRE 22.5x0.6mm	1
288	J046	0230-2259-0000	JUMPER WIRE 22.5x0.6mm	1
289	J048	0230-1259-0000	JUMPER WIRE 12.5*0.6mm	1
290	J049	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
291	J050	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
292	J051	0230-2509-0000	JUMPER WIRE 25*0.6mm	1
293	J052	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
294	J053	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1
295	J054	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
296	J056	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
297	J057	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1
298	J058	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	1
299	J059	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
300	J060	0230-7508-0000	JUMPER WIRE 7.5*0.6mm	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
301	J061	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
302	J062	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
303	J063	0230-7508-0000	JUMPER WIRE 7.5*0.6mm	1
304	J065	0230-1259-0000	JUMPER WIRE 12.5*0.6mm	1
305	J067	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
306	J068	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1
307	J069	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
308	J071	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
309	J072	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1
310	J073	0230-7508-0000	JUMPER WIRE 7.5*0.6mm	1
311	J074	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
312	J075	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
313	J076	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
314	J077	0230-1259-0000	JUMPER WIRE 12.5*0.6mm	1
315	J078	0230-1259-0000	JUMPER WIRE 12.5*0.6mm	1
316	J079	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1
317	J080	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
318	J081	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
319	J082	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
320	J083	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
321	J084	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	1
322	J085	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1
323	J086	0230-2259-0000	JUMPER WIRE 22.5x0.6mm	1
324	J087	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
325	J088	0230-7508-0000	JUMPER WIRE 7.5*0.6mm	1
326	J089	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
327	J090	0230-1259-0000	JUMPER WIRE 12.5*0.6mm	1
328	J091	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
329	J092	0230-2259-0000	JUMPER WIRE 22.5x0.6mm	1
330	J093	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
331	J094	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
332	J095	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
333	J096	0230-7508-0000	JUMPER WIRE 7.5*0.6mm	1
334	J097	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
335	J098	0230-2009-0000	JUMPER WIRE 20*0.6mm	1
336	J099	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1
337	J100	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	1
338	J101	0230-1759-0000	JUMPER WIRE 17.5*0.6mm	1
339	J102	0230-1259-0000	JUMPER WIRE 12.5*0.6mm	1
340	J103	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
341	J105	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
342	J106	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
343	J107	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
344	J109	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
345	J110	0230-1259-0000	JUMPER WIRE 12.5*0.6mm	1
346	J112	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
347	J113	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
348	J115	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
349	JPC01	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	1
350	LA01	0360-1000-0010	RING CORE L:250uH 4A	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
351	LA02	0360-1000-0010	RING CORE L:250uH 4A	1
352	LA03	0370-0000-1010	FERRITE CORE RH 3.5x6x1.0(W)x2	1
353	LA04	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
354	LA05	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
355	LA06	0370-0000-1010	FERRITE CORE RH 3.5x6x1.0(W)x2	1
356	LA07	0370-0000-1010	FERRITE CORE RH 3.5x6x1.0(W)x2	1
357	LA10	0370-0000-1010	FERRITE CORE RH 3.5x6x1.0(W)x2	1
358	LC01	0344-2290-0601	PEAKING COIL 2.2uH 1/4W K A-T	1
359	LG01	0370-0000-0410	BEAD CORE RH 3.5x4.7x1.0mm	1
360	LH01	0350-0130-0050	X'FMR EI30 150uH 3A	1
361	LH02	0354-0125-0070	X'FMR H-CEN EI25 7.0mH 0.45A	1
362	LH05	0381-0000-0110	LINEARITY COIL 8.5uH -4A	1
363	LH06	0361-1000-0160	DRUM CORE L:64uH 10x16	1
364	MB02	1701-1402-0300	WIRE SADDLE/ YJ-203S	1
365	MB03	1712-0100-0154	CHASSIS BRACKET LEFT	1
366	MB04	1712-0100-0166	CHASSIS BRACKET RIGHT	1
367	MB05	1712-0100-1510	CHASSIS BRACKET FRONT GS815	1
368	MB06	1712-0100-3201	CHASSIS BRACKET REAR/AT897D	1
369	MB10	1724-2603-0602	SCREW,BTCW,M3.0x6L,Zn-Cc	12
370	MB11	1724-2603-1002	SCREW,BTCW,M3.0x10L,Zn-Cc	9
371	MB12	1724-3804-0802	SCREW,PBATW,M4.0x8L,Zz-Cc	1
372	MB13	1712-0300-0230	HEAT SINK FOR EMI GS815	1
373	MB14	1712-0100-0181	CRT SUPPORT-L	1
374	MB15	1712-0100-0191	CRT SUPPORT-R	1
375	MB16	1724-2603-0802	SCREW,BTCW,M3.0x8L,Zz-Cc	2
376	MB17	1701-1500-0170	WIRE CLIP TA-8	2
377	PCB1	0174-2240-0313	PCB MAIN/PWR/CTRL BD K1 337x271 GS815	1
378	PRC01	0141-1002-1850	ARRAY RES. A(X) 10Kohm 1/8W J 8P	1
379	QA01	0420-1002-0508	POWER MOS 2SK956 TO-3P (800V 9A)	1
380	QA01H	1712-0400-1301	HEAT SINK 60Wx15Tx80H-40H	1
381	QA01R	1701-1100-0100	SILICON RUBBER/TO-3P3	1
382	QA01S	1724-1703-1002	SCREW,PB,M3.0x10L,Zn-Cc	1
383	QA02	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
384	QA04	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
385	QA07	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
386	QA09	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
387	QA10	0410-0000-1109	TRANSISTOR 2SA733P TO-92 T	1
388	QA11	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
389	QB03	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
390	QB04	0410-0000-1109	TRANSISTOR 2SA733P TO-92 T	1
391	QB05	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
392	QC10	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
393	QC11	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
394	QC14	0410-0000-1109	TRANSISTOR 2SA733P TO-92 T	1
395	QE01	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	1
396	QE02	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	1
397	QE05	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	1
398	QE06	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	1
399	QE07	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	1
400	QE08	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
401	QE09	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	1
402	QE10	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	1
403	QG01	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	1
404	QG03	0420-1001-5401	POWER MOS IRF740 TO-220 3PIN	1
405	QG03H	1712-0400-0241	HEAT SINK (60.1W*45H*15T) GS815	1
406	QG03R	1701-1100-0801	SILICON RUBBER /TO1633(30)	1
407	QG03S	1724-1703-1202	SCREW,PB,M3.0x12L,Zn-Cc	1
408	QG03W	1701-0600-0200	TRANSISTOR COVER / TR-08	1
409	QG04	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	1
410	QG05	0410-4000-2111	TRANSISTOR BF421 TO-92 T	1
411	QG06	0410-4000-1111	TRANSISTOR BF420 TO-92 T	1
412	QG07	0410-0000-1109	TRANSISTOR 2SA733P TO-92 T	1
413	QG08	0410-4000-3105	TRANSISTOR BF422 TO-92 T	1
414	QG09	0410-3000-3306	TRANSISTOR 2SD669AC TO-126	1
415	QG09H	1712-0400-0202	HEAT SINK (15W*11T*40.0H)	1
416	QG09S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	1
417	QG10	0410-1000-1306	TRANSISTOR 2SB649AC TO-126	1
418	QG10H	1712-0400-0202	HEAT SINK (15W*11T*40.0H)	1
419	QG10S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	1
420	QG11	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	1
421	QG12	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
422	QG13	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
423	QG14	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
424	QG15	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	1
425	QG16	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
426	QG17	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
427	QG18	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
428	QG19	0410-4000-1111	TRANSISTOR BF420 TO-92 T	1
429	QG20	0410-4000-2111	TRANSISTOR BF421 TO-92 T	1
430	QH01	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	1
431	QH02	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	1
432	QH05	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
433	QH06	0410-2001-5516	TR NPN 2SC5584 1500V 20A TOP-3L	1
434	QH06H1	1712-0400-0220	HEAT SINK (84Wx100Hx15T) GS815	1
435	QH06H2	1712-0400-0230	HEAT SINK (84W*63.2H*15T) GS815	1
436	QH06R	1701-1100-1000	SILICON RUBBER / TO-3025	1
437	QH06S1	1724-1703-0802	SCREW,PB,M3.0x8L,Zn-Cc	1
438	QH06S2	1721-1003-0810	TAP. SCREW-TP #3.0x8.0L, Zn-Cc	5
439	QH07	0410-6000-1311	TRANSISTOR BD139 TO-126	1
440	QH07N	1910-3005-0002	NUT M3.0x0.5,Zn-Cc	1
441	QH07S	1724-1703-0802	SCREW,PB,M3.0x8L,Zn-Cc	1
442	QH08	0410-6000-2311	TRANSISTOR BD140 TO-126	1
443	QH09	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	1
444	QH10	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
445	QH12	0420-1000-2407	POWER MOS IRF640 TO-220	1
446	QH13	0420-1000-2407	POWER MOS IRF640 TO-220	1
447	QH13H	1712-0400-0202	HEAT SINK (15W*11T*40.0H)	1
448	QH13R	1701-1100-0200	SILICON RUBBER/TO-2203	1
449	QH13S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	1
450	QH13W	1701-1300-0100	TRANSISTOR WASHER/602S	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
451	QH14	0420-1000-2407	POWER MOS IRF640 TO-220	1
452	QH14H	1712-0400-0202	HEAT SINK (15W*11T*40.0H)	1
453	QH14R	1701-1100-0200	SILICON RUBBER/TO-2203	1
454	QH14S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	1
455	QH14W	1701-1300-0100	TRANSISTOR WASHER/602S	1
456	QH15	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
457	QH16	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
458	QH17	0410-0000-2106	TRANSISTOR 2SA673AC TO-92 T	1
459	QH18	0410-0000-1109	TRANSISTOR 2SA733P TO-92 T	1
460	QH19	0420-1000-1401	POWER MOS IRF630 TO-220	1
461	QH20	0410-0000-1109	TRANSISTOR 2SA733P TO-92 T	1
462	QH21	0410-2000-3106	TRANSISTOR 2SC1213AC TO-92 T	1
463	QH22	0420-1001-5401	POWER MOS IRF740 TO-220 3PIN	1
464	QH22H	1712-0400-1401	HEAT SINK (23.5Wx16.5Tx50H)	1
465	QH22R	1701-1100-0200	SILICON RUBBER/TO-2203	1
466	QH22S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	1
467	QH22W	1701-1300-0100	TRANSISTOR WASHER/602S	1
468	QH24	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
469	QH25	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
470	QH26	0410-2000-1110	TRANSISTOR 2SC945P TO-92 T	1
471	QH28	0410-6000-1311	TRANSISTOR BD139 TO-126	1
472	QH28H	1712-0400-0100	HEAT SINK (12Wx5Tx22H)	1
473	QH28S	1724-1703-0602	SCREW,PB,M3.0x6L,Zn-Cc	1
474	RA01	0130-1004-1250	RES. CF 1.0Mohm 1/2W J A	1
475	RA03	0130-4702-0152	RES. CF 47Kohm 1W J A-FK	1
476	RA04	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
477	RA06	0130-3309-1450	RES. CF 33ohm 1/4W J A	1
478	RA07	0130-4708-1450	RES. CF 4.7ohm 1/4W J A	1
479	RA08	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
480	RA09	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
481	RA10	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
482	RA11	0132-0128-0252	RES. MOF 0.12ohm 2W J A-FK	1
483	RA12	0130-2702-1850	RES. CF 27Kohm 1/8W J A	1
484	RA13	0130-1202-1450	RES. CF 12Kohm 1/4W J A	1
485	RA14	0130-4700-1850	RES. CF 470ohm 1/8W J A	1
486	RA15	0130-1003-1850	RES. CF 100Kohm 1/8W J A	1
487	RA16	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
488	RA17	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
489	RA18	0130-1009-1450	RES. CF 10ohm 1/4W J A	1
490	RA19	0130-1009-1450	RES. CF 10ohm 1/4W J A	1
491	RA20	0130-2201-1450	RES. CF 2.2Kohm 1/4W J A	1
492	RA21	0130-3309-1250	RES. CF 33ohm 1/2W J A	1
493	RA22	0132-1203-0152	RES. MOF 120Kohm 1W J A-FK	1
494	RA23	0132-6202-0112	RES. MOF 62Kohm 1W F A-FK	1
495	RA24	0131-2001-1410	RES. MF 2.00Kohm 1/4W F A	1
496	RA25	0130-2203-1850	RES. CF 220Kohm 1/8W J A	1
497	RA26	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
498	RA27	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
499	RA28	0130-1000-1450	RES. CF 100ohm 1/4W J A	1
500	RA29	0130-1000-1850	RES. CF 100ohm 1/8W J A	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
501	RA31	0130-1001-1250	RES. CF 1.0Kohm 1/2W J A	1
502	RA32	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
503	RA33	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
504	RA34	0130-1009-1450	RES. CF 10ohm 1/4W J A	1
505	RA35	0132-6800-0252	RES. MOF 680ohm 2W J A-FK	1
506	RA36	0130-1009-1850	RES. CF 10ohm 1/8W J A	1
507	RA38	0132-0478-0152	RES. MOF 0.47ohm 1W J A-FK	1
508	RA40	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
509	RA41	0132-6802-0252	RES. MOF 68Kohm 2W J A-FK	1
510	RA42	0132-6802-0252	RES. MOF 68Kohm 2W J A-FK	1
511	RA43	0130-1009-1850	RES. CF 10ohm 1/8W J A	1
512	RA44	0130-1008-1850	RES. CF 1.0ohm 1/8W J A	1
513	RA45	0130-2000-1850	RES. CF 200ohm 1/8W J A	1
514	RA46	0130-5109-1250	RES. CF 51ohm 1/2W J A	1
515	RA47	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
516	RA48	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
517	RA49	0130-2201-1850	RES. CF 2.2Kohm 1/8W J A	1
518	RA50	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
519	RA51	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
520	RA52	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
521	RA68	0130-1003-1450	RES. CF 100Kohm 1/4W J A	1
522	RB01	0130-4701-1450	RES. CF 4.7Kohm 1/4W J A	1
523	RB02	0130-1802-1850	RES. CF 18Kohm 1/8W J A	1
524	RB03	0130-1000-1450	RES. CF 100ohm 1/4W J A	1
525	RB04	0130-6801-1850	RES. CF 6.8Kohm 1/8W J A	1
526	RB05	0130-5102-1850	RES. CF 51Kohm 1/8W J A	1
527	RB06	0130-2401-1450	RES. CF 2.4Kohm 1/4W J A	1
528	RB07	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
529	RB08	0130-1202-1450	RES. CF 12Kohm 1/4W J A	1
530	RB10	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
531	RB11	0130-4708-1450	RES. CF 4.7ohm 1/4W J A	1
532	RB12	0130-1000-1450	RES. CF 100ohm 1/4W J A	1
533	RB14	0130-1202-1850	RES. CF 12Kohm 1/8W J A	1
534	RB15	0130-3301-1850	RES. CF 3.3Kohm 1/8W J A	1
535	RB16	0130-1202-1850	RES. CF 12Kohm 1/8W J A	1
536	RB17	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
537	RB18	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
538	RB19	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
539	RB20	0130-1501-1450	RES. CF 1.5Kohm 1/4W J A	1
540	RB21	0130-1000-1450	RES. CF 100ohm 1/4W J A	1
541	RB22	0130-1000-1450	RES. CF 100ohm 1/4W J A	1
542	RB23	0130-2202-1850	RES. CF 22Kohm 1/8W J A	1
543	RB24	0130-3301-1850	RES. CF 3.3Kohm 1/8W J A	1
544	RB25	0131-5620-1810	RES. MF 562ohm 1/8W F A	1
545	RB26	0131-2741-1810	RES. MF 2.74Kohm 1/8W F A	1
546	RB27	0130-1000-1450	RES. CF 100ohm 1/4W J A	1
547	RB28	0131-1212-1410	RES. MF 12.1Kohm 1/4W F A	1
548	RB29	0131-6191-1410	RES. MF 6.19Kohm 1/4W F A	1
549	RB30	0132-1008-0252	RES. MOF 1ohm 2W J A-FK	1
550	RB31	0132-1008-0252	RES. MOF 1ohm 2W J A-FK	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
551	RB32	0130-1508-1450	RES. CF 1.5ohm 1/4W J A	1
552	RB33	0131-1212-1410	RES. MF 12.1Kohm 1/4W F A	1
553	RB34	0131-6191-1810	RES. MF 6.19Kohm 1/8W F A	1
554	RB35	0132-1008-0252	RES. MOF 1ohm 2W J A-FK	1
555	RB36	0130-6800-1250	RES. CF 680ohm 1/2W J A	1
556	RB43	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
557	RB44	0230-5008-0000	JUMPER WIRE 5.0*0.6mm	1
558	RB45	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
559	RB46	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
560	RB47	0130-1009-1450	RES. CF 10ohm 1/4W J A	1
561	RB51	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
562	RB52	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
563	RB54	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
564	RB62	0130-3309-1450	RES. CF 33ohm 1/4W J A	1
565	RB63	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
566	RC01	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
567	RC02	0130-2201-1450	RES. CF 2.2Kohm 1/4W J A	1
568	RC04	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
569	RC05	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
570	RC07	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
571	RC10	0130-1005-1850	RES. CF 10Mohm 1/8W J A	1
572	RC11	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
573	RC12	0130-1000-1450	RES. CF 100ohm 1/4W J A	1
574	RC13	0130-2002-1450	RES. CF 20Kohm 1/4W J A	1
575	RC14	0130-2002-1450	RES. CF 20Kohm 1/4W J A	1
576	RC15	0130-2002-1850	RES. CF 20Kohm 1/8W J A	1
577	RC16	0130-1502-1450	RES. CF 15Kohm 1/4W J A	1
578	RC17	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
579	RC18	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
580	RC20	0130-2201-1850	RES. CF 2.2Kohm 1/8W J A	1
581	RC22	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
582	RC23	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
583	RC25	0130-2201-1450	RES. CF 2.2Kohm 1/4W J A	1
584	RC27	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
585	RC31	0130-2002-1450	RES. CF 20Kohm 1/4W J A	1
586	RC32	0130-1000-1450	RES. CF 100ohm 1/4W J A	1
587	RC33	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
588	RC34	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
589	RC35	0130-2201-1850	RES. CF 2.2Kohm 1/8W J A	1
590	RC36	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
591	RC37	0130-2201-1850	RES. CF 2.2Kohm 1/8W J A	1
592	RC38	0130-2201-1450	RES. CF 2.2Kohm 1/4W J A	1
593	RC39	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
594	RC40	0130-2201-1850	RES. CF 2.2Kohm 1/8W J A	1
595	RC41	0130-2002-1850	RES. CF 20Kohm 1/8W J A	1
596	RC42	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
597	RC43	0130-1000-1450	RES. CF 100ohm 1/4W J A	1
598	RC44	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
599	RC45	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
600	RC49	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
601	RC50	0130-2002-1450	RES. CF 20Kohm 1/4W J A	1
602	RC52	0130-1000-1450	RES. CF 100ohm 1/4W J A	1
603	RC59	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
604	RC61	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
605	RC63	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
606	RC65	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
607	RC67	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
608	RC73	0130-1002-1250	RES. CF 10Kohm 1/2W J A	1
609	RC74	0130-4701-1450	RES. CF 4.7Kohm 1/4W J A	1
610	RC75	0130-4701-1450	RES. CF 4.7Kohm 1/4W J A	1
611	RC76	0130-4701-1450	RES. CF 4.7Kohm 1/4W J A	1
612	RC77	0130-4700-1850	RES. CF 470ohm 1/8W J A	1
613	RC78	0130-4700-1850	RES. CF 470ohm 1/8W J A	1
614	RC79	0130-4700-1850	RES. CF 470ohm 1/8W J A	1
615	RC80	0130-6809-1450	RES. CF 68ohm 1/4W J A	1
616	RC81	0130-6809-1450	RES. CF 68ohm 1/4W J A	1
617	RC82	0130-1000-1850	RES. CF 100ohm 1/8W J A	1
618	RE01	0130-3302-1850	RES. CF 33Kohm 1/8W J A	1
619	RE02	0130-1003-1450	RES. CF 100Kohm 1/4W J A	1
620	RE07	0130-1800-1250	RES. CF 180ohm 1/2W J A	1
621	RE08	0130-5109-1450	RES. CF 51ohm 1/4W J A	1
622	RE10	0130-1009-1850	RES. CF 10ohm 1/8W J A	1
623	RE13	0130-3302-1450	RES. CF 33Kohm 1/4W J A	1
624	RE14	0130-1003-1450	RES. CF 100Kohm 1/4W J A	1
625	RE15	0130-7509-1250	RES. CF 75ohm 1/2W J A	1
626	RE16	0130-5109-1450	RES. CF 51ohm 1/4W J A	1
627	RE17	0130-3302-1450	RES. CF 33Kohm 1/4W J A	1
628	RE18	0130-1003-1450	RES. CF 100Kohm 1/4W J A	1
629	RE19	0130-1800-1250	RES. CF 180ohm 1/2W J A	1
630	RE20	0130-5109-1450	RES. CF 51ohm 1/4W J A	1
631	RE21	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
632	RE22	0130-1601-1450	RES. CF 1.6Kohm 1/4W J A	1
633	RE24	0130-5109-1450	RES. CF 51ohm 1/4W J A	1
634	RE25	0130-7509-1250	RES. CF 75ohm 1/2W J A	1
635	RE26	0130-1003-1450	RES. CF 100Kohm 1/4W J A	1
636	RE29	0130-1003-1450	RES. CF 100Kohm 1/4W J A	1
637	RE30	0130-3302-1450	RES. CF 33Kohm 1/4W J A	1
638	RG01	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
639	RG02	0130-1008-1450	RES. CF 1.0ohm 1/4W J A	1
640	RG03	0130-3301-1850	RES. CF 3.3Kohm 1/8W J A	1
641	RG04	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
642	RG05	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
643	RG08	0130-2002-1450	RES. CF 20Kohm 1/4W J A	1
644	RG09	0130-2702-1850	RES. CF 27Kohm 1/8W J A	1
645	RG10	0130-5601-1850	RES. CF 5.6Kohm 1/8W J A	1
646	RG11	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
647	RG12	0130-4704-1850	RES. CF 4.7Mohm 1/8W J A	1
648	RG13	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
649	RG14	0130-6801-1850	RES. CF 6.8Kohm 1/8W J A	1
650	RG15	0130-3002-1850	RES. CF 30Kohm 1/8W J A	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
651	RG16	0130-1003-1850	RES. CF 100Kohm 1/8W J A	1
652	RG17	0130-3603-1850	RES. CF 360Kohm 1/8W J A	1
653	RG18	0130-4709-1450	RES. CF 47ohm 1/4W J A	1
654	RG20	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
655	RG21	0130-2200-1450	RES. CF 220ohm 1/4W J A	1
656	RG22	0132-2208-0252	RES. MOF 2.2ohm 2W J A-FK	1
657	RG23	0130-4709-1450	RES. CF 47ohm 1/4W J A	1
658	RG24	0130-2202-1850	RES. CF 22Kohm 1/8W J A	1
659	RG26	0130-2202-1850	RES. CF 22Kohm 1/8W J A	1
660	RG27	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
661	RG28	0130-1302-1850	RES. CF 13Kohm 1/8W J A	1
662	RG30	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
663	RG31	0130-4709-1450	RES. CF 47ohm 1/4W J A	1
664	RG32	0130-1003-1450	RES. CF 100Kohm 1/4W J A	1
665	RG33	0130-3301-1450	RES. CF 3.3Kohm 1/4W J A	1
666	RG34	0130-1003-1450	RES. CF 100Kohm 1/4W J A	1
667	RG35	0132-1203-0252	RES. MOF 120Kohm 2W J A-FK	1
668	RG37	0130-5601-1850	RES. CF 5.6Kohm 1/8W J A	1
669	RG38	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
670	RG39	0130-2701-1850	RES. CF 2.7Kohm 1/8W J A	1
671	RG40	0130-1103-1850	RES. CF 110Kohm 1/8W J A	1
672	RG41	0130-1203-1850	RES. CF 120Kohm 1/8W J A	1
673	RG42	0130-1001-1250	RES. CF 1.0Kohm 1/2W J A	1
674	RG43	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
675	RG44	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
676	RG45	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
677	RG46	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
678	RG47	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
679	RG49	0130-9103-1450	RES. CF 910Kohm 1/4W J A	1
680	RG50	0130-4301-1850	RES. CF 4.3Kohm 1/8W J A	1
681	RG51	0130-2003-1250	RES. CF 200Kohm 1/2W J A	1
682	RG52	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
683	RG53	0130-1801-1850	RES. CF 1.8Kohm 1/8W J A	1
684	RG54	0130-4709-1850	RES. CF 47ohm 1/8W J A	1
685	RG55	0130-2002-1450	RES. CF 20Kohm 1/4W J A	1
686	RG56	0130-1009-1850	RES. CF 10ohm 1/8W J A	1
687	RG57	0130-1009-1850	RES. CF 10ohm 1/8W J A	1
688	RG58	0130-2409-1450	RES. CF 24ohm 1/4W J A	1
689	RG59	0130-2002-1450	RES. CF 20Kohm 1/4W J A	1
690	RG60	0130-8200-1850	RES. CF 820ohm 1/8W J A	1
691	RG61	0130-8201-1850	RES. CF 8.2Kohm 1/8W J A	1
692	RG62	0132-1009-0152	RES. MOF 10ohm 1W J A-FK	1
693	RG63	0130-6803-1850	RES. CF 680Kohm 1/8W J A	1
694	RG65	0130-5100-1850	RES. CF 510ohm 1/8W J A	1
695	RG66	0130-1003-1850	RES. CF 100Kohm 1/8W J A	1
696	RG67	0130-5601-1850	RES. CF 5.6Kohm 1/8W J A	1
697	RG68	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
698	RG69	0130-2700-1850	RES. CF 270ohm 1/8W J A	1
699	RG70	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
700	RG72	0130-2701-1850	RES. CF 2.7Kohm 1/8W J A	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
701	RG73	0130-1009-1850	RES. CF 10ohm 1/8W J A	1
702	RG74	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
703	RG75	0130-5100-1850	RES. CF 510ohm 1/8W J A	1
704	RH01	0130-1202-1850	RES. CF 12Kohm 1/8W J A	1
705	RH02	0130-1002-1450	RES. CF 10Kohm 1/4W J A	1
706	RH03	0131-5621-1810	RES. MF 5.62Kohm 1/8W F A	1
707	RH04	0130-6801-1850	RES. CF 6.8Kohm 1/8W J A	1
708	RH05	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
709	RH06	0130-1203-1850	RES. CF 120Kohm 1/8W J A	1
710	RH07	0130-2202-1450	RES. CF 22Kohm 1/4W J A	1
711	RH09	0130-1000-1450	RES. CF 100ohm 1/4W J A	1
712	RH10	0130-1003-1850	RES. CF 100Kohm 1/8W J A	1
713	RH11	0130-1303-1450	RES. CF 130Kohm 1/4W J A	1
714	RH12	0130-2403-1850	RES. CF 240Kohm 1/8W J A	1
715	RH14	0130-6801-1850	RES. CF 6.8Kohm 1/8W J A	1
716	RH15	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
717	RH16	0130-1009-1850	RES. CF 10ohm 1/8W J A	1
718	RH17	0130-3900-1250	RES. CF 390ohm 1/2W J A	1
719	RH18	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
720	RH20	0130-3302-1850	RES. CF 33Kohm 1/8W J A	1
721	RH21	0130-1009-1850	RES. CF 10ohm 1/8W J A	1
722	RH22	0130-8202-1850	RES. CF 82Kohm 1/8W J A	1
723	RH24	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
724	RH25	0130-1008-1850	RES. CF 1.0ohm 1/8W J A	1
725	RH26	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
726	RH27	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
727	RH28	0132-4702-0252	RES. MOF 47Kohm 2W J A-FK	1
728	RH30	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
729	RH31	0130-1009-1450	RES. CF 10ohm 1/4W J A	1
730	RH32	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
731	RH33	0130-2209-1450	RES. CF 22ohm 1/4W J A	1
732	RH34	0132-1208-0252	RES. MOF 1.2ohm 2W J A-FK	1
733	RH36	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
734	RH41	0135-1008-0551	RES. CEMENT 1ohm 5W J SQM	1
735	RH42	0132-0158-0150	RES. MOF 0.15ohm 1W J A	1
736	RH43	0132-2200-0152	RES. MOF 220ohm 1W J A-FK	1
737	RH44	0130-1009-1450	RES. CF 10ohm 1/4W J A	1
738	RH45	0130-4700-1850	RES. CF 470ohm 1/8W J A	1
739	RH46	0132-1509-0252	RES. MOF 15ohm 2W J A-FK	1
740	RH47	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
741	RH50	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
742	RH51	0130-2709-1450	RES. CF 27ohm 1/4W J A	1
743	RH52	0133-2008-0552	RES. MOF(M) 2ohm 5W J A-FK	1
744	RH53	0130-4700-1250	RES. CF 470ohm 1/2W J A	1
745	RH54	0230-1009-0000	JUMPER WIRE 10*0.6mm	1
746	RH55	0132-1000-0252	RES. MOF 100ohm 2W J A-FK	1
747	RH56	0130-1001-1850	RES. CF 1.0Kohm 1/8W J A	1
748	RH57	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
749	RH58	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
750	RH59	0132-6808-0252	RES. MOF 6.8ohm 2W J A-FK	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
751	RH60	0133-2008-0552	RES. MOF(M) 2ohm 5W J A-FK	1
752	RH61	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
753	RH62	0130-2001-1850	RES. CF 2.0Kohm 1/8W J A	1
754	RH63	0130-3309-1450	RES. CF 33ohm 1/4W J A	1
755	RH64	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
756	RH65	0130-2202-1450	RES. CF 22Kohm 1/4W J A	1
757	RH66	0130-2202-1450	RES. CF 22Kohm 1/4W J A	1
758	RH67	0130-2202-1450	RES. CF 22Kohm 1/4W J A	1
759	RH68	0130-2202-1450	RES. CF 22Kohm 1/4W J A	1
760	RH69	0130-4709-1850	RES. CF 47ohm 1/8W J A	1
761	RH70	0230-1509-0000	JUMPER WIRE 15*0.6mm	1
762	RH72	0130-4702-1850	RES. CF 47Kohm 1/8W J A	1
763	RH73	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
764	RH74	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
765	RH75	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
766	RH76	0131-3012-1410	RES. MF 30.1Kohm 1/4W F A	1
767	RH77	0130-4701-1850	RES. CF 4.7Kohm 1/8W J A	1
768	RH78	0130-3301-1850	RES. CF 3.3Kohm 1/8W J A	1
769	RH79	0130-1001-1450	RES. CF 1.0Kohm 1/4W J A	1
770	RH80	0130-1002-1850	RES. CF 10Kohm 1/8W J A	1
771	RH81	0130-2202-1450	RES. CF 22Kohm 1/4W J A	1
772	RH82	0130-2403-1450	RES. CF 240Kohm 1/4W J A	1
773	RLA01	0252-1250-2012	RELAY 2POLES 250V/5A/12Vdc ST	1
774	RLH01	0251-1210-0016	RELAY 1POLES 240V/10A/12Vdc DT	1
775	SWA01B	1712-0100-0470	AC BRACKET AT1099DA	1
776	TA01	0352-0200-0040	LINE FILTER ET-28 15mH-15mH 0.6@*58T	1
777	TA02	0350-0419-0030	X'FMR EEL19 5.5mH AT1099DA	1
778	TA03	0350-0242-0090	X'FMR EE4215 105uH (21"&22")	1
779	TA04	0353-0600-0010	X'FMR SYNC UU10.5 1.75-1.75mH	1
780	TG01	0480-0000-0100	F.B.T. 26.5KV 3000PF (CF1043E)	1
781	TG02	0351-0125-0020	X'FMR EI25 24:240 Ts	1
782	TH02	0351-0213-0010	X'FMR EE13 35mH 250:1	1
783	TH03	0351-0122-0010	X'FMR DRIVE EI22 2mH-80uH	1
784	THA02	0161-8092-0030	POSISTOR 8ohm 20A 2P	1
785	THA03	0160-5091-0020	NTCR SCK-0510 5ohm 10A F7.5	1
786	VRG01	0151-1033-1002	SVR M/STAND/B 10Kohm B 6	1
787	VRH01	0151-1023-1001	SVR M/STAND/B 1Kohm B 6	1
788	VRH02	0151-2023-1001	SVR M/STAND/B 2Kohm B 6	1
789	WA01	0262-0000-0012	AC SOCKET 0714C PCB TYPE	1
790	WA01W	0460-1701-0041	WH SRA4.3@ 60mm 1015#18 G/Y	1
791	WA02	0451-1000-0294	WAFER 10mm 2P/WHITE	1
792	WA03	0451-3963-0154	WAFER 3.96mm 3P-1 180'	1
793	WA06	0460-1102-0020	WH XH2P-SCN2P 1185#26 280mm	1
794	WB01	0460-1112-0050	WH XH12P-SCN12P 1007#24 180mm + CORE	1
795	WC01	0451-2500-0414	WAFER 2.50mm 4P 180' Kink	1
796	WC02	0300-1200-3150	D-SUB Female 90' 15P 3ROW	1
797	WC05	0460-1107-0090	WH XH7P-SCN7P 1354(A+B)#28 260 mm+core	1
798	WE01	0451-2000-0204	WAFER 2.00mm 2P 180'Kink	1
799	WE02	0451-2000-0204	WAFER 2.00mm 2P 180'Kink	1
800	WE03	0451-2541-0374	WAFER EH2.5mm 3P 180' Kink	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
801	WE04	0451-2500-0314	WAFER 2.50mm 3P 180' Kink	1
802	WG01	0459-2540-0277	PIN HEADER 2.54mm2P 180'11.6mm	1
803	WH01	0452-1080-0496	WAFER 10/8mm 4P	1
804	WH05	0451-3963-0154	WAFER 3.96mm 3P-1 180'	1
805	WH05R	0135-9008-2053	RES. CEMENT 9ohm 20W J SQHG	1
806	WH05S	1724-2603-0602	SCREW,BTCW,M3.0x6L,Zn-Cc	1
807	WH05W	0460-1203-0100	WH VHR3P 1015#18 120/100mm BLACK	1
808	XTAC01	0280-1000-0015	X'TAL 10MHz 49/U 30ppm 30PF 1mW	1
809	ZDA02	0400-1751-2000	ZENER 18-2 17.5-18.3V 1/2W	1
810	ZDA03	0400-2361-2000	ZENER 24-2 23.6-24.3V 1/2W	1
811	ZDA04	0400-0891-2000	ZENER 9C1 8.9-9.3V 1/2W	1
812	ZDB01	0400-3421-2000	ZENER 36-1 34.2-35.7V 1/2W	1
813	ZDC02	0400-0581-2000	ZENER 6C1 5.8-6.1V 1/2W	1
814	ZDC03	0400-0581-2000	ZENER 6C1 5.8-6.1V 1/2W	1
815	ZDG01	0400-0381-2000	ZENER 4B2 3.8-4.0V 1/2W	1
816	ZDH01	0400-1261-2000	ZENER 12B2 12.6-13.1V 1/2W	1
817	ZDH04	0400-1261-2000	ZENER 12B2 12.6-13.1V 1/2W	1

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11.5. 3021-0062-0301 BASE(USB) G7397 PC+ABS 170105054010

ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
1	6V01	1701-0504-3000	SWIVEL BALL G7397 PC+ABS PF790	1
2	6V02	1701-0505-4010	USB BASE G7397 ABS GS815	1
3	6V02M	1701-1000-0200	BASE FOOT 18.8x5.8t	3
4	6V03	1701-0800-0160	USB BASE REAR COVER G7397	1

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11.6. 3021-0092-0303 CHASSIS ASS'Y

ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
1	1P14	1925-1100-0402	PE BAG 360Lx200Wx0.04t/EUROPE	1
2	ACH01	3021-0122-0151	ASS'Y VIDEO BD GS815 (ICV02:VPS16)	1
3	ACH02	3021-0062-0150	ASS'Y MAIN/PWR/CTRL BD GS815	1
4	ACH06	0220-2020-0261	SW PUSH BOTTOM SFDLD11E7U-AA	1
5	ACH08	0460-1203-0090	WH VHR3P UL2464#18*2C+AL 440mm BLACK	1
6	ACH14	1701-1400-9800	WIRE SADDLE/ YJ98	7
7	ACH19	1712-0100-0032	SUPPORT BRACKET LEFT	1
8	ACH20	1712-0100-0042	SUPPORT BRACKET RIGHT	1
9	ACH23	1712-0100-0080	CHASSIS HOLDER AT398HA	1
10	ACH26	1712-0100-1302	CRT BOARD BRACKET	1
11	ACH28	1712-0300-0030	VIDEO BD SHIELDING	1
12	ACH31	1712-0500-0162	CRT BD SHIELDING-A	1
13	ACH32	1712-0600-0010	COPPER CLAW AT398HA	2
14	ACH34	1724-2603-0802	SCREW,BTCW,M3.0x8L,Zz-Cc	25
15	ACH37	1701-1500-1300	FBT CLIPS / HV-3	1
16	ACH38	0460-1701-0400	WH SRA4.3-ELR3.8 1015#18 100mm	1
17	ACH39	0460-1701-0330	WH SRA4.3@-SRA5.4@ 1015#18 410mm	1
18	ACH40	0460-1701-0270	WH SRA4.3 0.12/112C 130mm + H-S	1
19	ACH41	0460-1701-0360	WH SRA4.3@-SRA5.4@ 0.12/112C 100mm+H-	4
20	ACH42	1712-0500-0172	BOTTOM SHIELDING AT1097FB,AT1099DB	1
21	ACH43	1701-1500-0900	SPACER SUPPORTS/FCB-10	9
22	ACH45	1947-1600-0080	.INF&.ICM CD ROM DATE:000512	1
23	ACH46	1701-1500-0130	WIRE MOUNT FW-4D-3M	1
24	ACH47	1701-1500-0140	CABLE CLAMP PC-4	2
25	ACH48	0460-1701-0370	WH SRA4.3 1015#18 300mm BLK	2
26	ACH49	0460-1701-0380	WH SRA4.3-SRA4.3 1015#18 160mm BLK	1
27	ACH50	0460-1701-0390	WH SRA4.3 1015#18 110mm BLK	1
28	ACH51	1701-1500-0150	SPACER SUPPORT ACBS-9Y	1
29	ACH52	1701-1100-0010	RUBBER FOOT	2
30	ACH53	1701-1500-0010	WIRE CLIPS NYLON 66(UL)	2
31	ACH54	1701-1401-4200	CABLE TIE (YJ-142S)	3
32	ASCH05	0330-2100-0320	DEGAUSSING 21" 19.6ohm 0.5x90Ts	1
33	ASMO04	3021-0242-0306	BEZEL ASS'Y GS815	1
34	BC06	1936-1100-1860	B/C LBL VIEWSONIC GS815	1
35	BZ16	1724-3705-2502	SCREW,BPCTW,#5.0*25L,Zn-Cc	4
36	CR01	0210-0210-1353	CRT 21" M51LQV183X48 (A) HIT. .25mm	1
37	CR02	0242-0425-1504	HEAT S-T 4.0*0.25 15mm 125'	2
38	CR04	0460-2202-0082	BRAID 0.12/112C 1015#18 1030mm AT398HA	1
39	CR07	1936-1500-0200	FDA WARNING LBL AT396D	1
40	PC01	0320-4400-0010	POWER CORD 6ft 110V UL/CSA AL	1
41	SG01	0321-0400-0060	S.CABLE 1800mm 15(3R-3R) 3+6C / PC99	1
42	Y001	1925-1300-1640	MANUAL VIEWSONIC GS815	1
43	Y002	1925-1400-0090	TCO99 ECO DOCUMENT	1

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11.7. 3021-0122-0151 VIDEO BD (ICV02: VPS16)

ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
1	CV01	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
2	CV02	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
3	CV03	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
4	CV04	0101-1101-1211	E/C GEN. 100uF 16V 105' F	1
5	CV05	0101-1101-1211	E/C GEN. 100uF 16V 105' F	1
6	CV06	0101-1470-1211	E/C GEN. 47uF 16V 105' F	1
7	CV07	0101-1221-1211	E/C GEN. 220uF 16V 105' F	1
8	CV08	0111-3223-5115	C/M Multi 0.022uF 50V X7R 0805	1
9	CV09	0101-1470-1211	E/C GEN. 47uF 16V 105' F	1
10	CV10	0101-1470-2212	E/C GEN. 47uF 200V 105' K	1
11	CV11	0111-1103-5222	C/C DISK 0.01uF 500V Z5U F-K	1
12	CV13	0111-3300-5105	C/M Multi 30PF 50V NPO 0805	1
13	CV14	0111-1103-5222	C/C DISK 0.01uF 500V Z5U F-K	1
14	CV15	0111-2330-5202	C/C DISK 33PF 500V NPO F-K	1
15	CV16	0111-1103-5222	C/C DISK 0.01uF 500V Z5U F-K	1
16	CV17	0101-1101-2012	E/C GEN. 100uF 100V 105' K	1
17	CV18	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	1
18	CV20	0111-3103-5115	C/M Multi 0.01uF 50V X7R 0805	1
19	CV24	0111-3121-5105	C/M Multi 120PF 50V NPO 0805	1
20	CV25	0111-3121-5105	C/M Multi 120PF 50V NPO 0805	1
21	CV26	0101-3109-2311	E/C N-P. 1uF 250V 105' F	1
22	CV27	0101-3109-2311	E/C N-P. 1uF 250V 105' F	1
23	CV28	0101-3109-2311	E/C N-P. 1uF 250V 105' F	1
24	CV29	0111-1103-5222	C/C DISK 0.01uF 500V Z5U F-K	1
25	CV30	0101-1109-2311	E/C GEN. 1.0uF 250V 105' F	1
26	CV31	0101-1109-2311	E/C GEN. 1.0uF 250V 105' F	1
27	CV32	0101-1109-2311	E/C GEN. 1.0uF 250V 105' F	1
28	CV34	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
29	CV35	0111-1103-5222	C/C DISK 0.01uF 500V Z5U F-K	1
30	CV37	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	1
31	CV38	0111-1103-2322	C/C DISK 0.01uF 2KV Z5U F-K	1
32	CV39	0120-3472-6331	P/C PPN 0.0047uF 630V J F-K	1
33	CV40	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	1
34	CV41	0101-1101-1211	E/C GEN. 100uF 16V 105' F	1
35	CV42	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	1
36	CV43	0101-1101-1211	E/C GEN. 100uF 16V 105' F	1
37	CV49	0111-3220-5105	C/M Multi 22PF 50V NPO 0805	1
38	CV50	0111-3104-5134	C/M Multi 0.1uF 50V Y5V 1206	1
39	CV51	0111-3121-5105	C/M Multi 120PF 50V NPO 0805	1
40	CV52	0111-2309-5202	C/C DISK 3.0PF 500V NPO F-K	1
41	CV55	0111-3331-5105	C/M Multi 330PF 50V NPO 0805	1
42	CV56	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
43	CV57	0111-3300-5105	C/M Multi 30PF 50V NPO 0805	1
44	CV58	0111-3331-5105	C/M Multi 330PF 50V NPO 0805	1
45	CV59	0111-2309-5202	C/C DISK 3.0PF 500V NPO F-K	1
46	CV60	0111-2309-5202	C/C DISK 3.0PF 500V NPO F-K	1
47	CV61	0111-3300-5105	C/M Multi 30PF 50V NPO 0805	1
48	CV63	0111-3224-5135	C/M Multi 0.22uF 50V Y5V 0805	1
49	CV64	0111-3224-5135	C/M Multi 0.22uF 50V Y5V 0805	1
50	CV65	0111-3224-5135	C/M Multi 0.22uF 50V Y5V 0805	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
51	CV66	0111-3224-5135	C/M Multi 0.22uF 50V Y5V 0805	1
52	CV67	0101-1470-1211	E/C GEN. 47uF 16V 105' F	1
53	CV68	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
54	CV69	0101-1470-1511	E/C GEN. 47uF 50V 105' F	1
55	CV72	0101-1100-1511	E/C GEN. 10uF 50V 105' F	1
56	CV76	0111-3104-5125	C/M Multi 0.1uF 50V Z5U 0805	1
57	CV77	0111-3224-5134	C/M Multi 0.22uF 50V Y5V 1206	1
58	CV78	0111-3472-5115	C/M Multi 4700PF 50V X7R 0805	1
59	DV01	0390-5000-1052	GEN. DIODE 1N4148 T	1
60	DV02	0390-5000-1052	GEN. DIODE 1N4148 T	1
61	DV03	0390-5000-9132	GEN. DIODE BAV21 T	1
62	DV04	0390-5000-3022	GEN. DIODE 1N4002F T	1
63	DV05	0390-5000-9132	GEN. DIODE BAV21 T	1
64	DV06	0390-5000-9132	GEN. DIODE BAV21 T	1
65	DV07	0390-5000-1052	GEN. DIODE 1N4148 T	1
66	DV08	0390-5000-1052	GEN. DIODE 1N4148 T	1
67	DV09	0390-5000-1052	GEN. DIODE 1N4148 T	1
68	DV11	0390-5000-1052	GEN. DIODE 1N4148 T	1
69	DV12	0390-5000-1052	GEN. DIODE 1N4148 T	1
70	DV13	0390-5000-1052	GEN. DIODE 1N4148 T	1
71	DV14	0390-5000-1052	GEN. DIODE 1N4148 T	1
72	DV17	0390-5000-1052	GEN. DIODE 1N4148 T	1
73	DV18	0390-5000-1052	GEN. DIODE 1N4148 T	1
74	ICV01	0430-4006-1409	IC TDA4887 SDIP 24PIN	1
75	ICV02	0430-4004-3114	IC VPS16 DIP 15PIN	1
76	ICV02H	1712-0300-0220	VIDEO BD HEAT SINK GS815	1
77	ICV02S	1724-2603-1202	SCREW,BTCW,M3.0x12L,Zn-Cc	2
78	ICV03	0430-6001-3207	IC L7808CV TO-220 3PIN	1
79	ICV04	0430-4001-3104	IC LM393N DIP-8	1
80	ICV05	0430-7003-9141	IC D1642 DIP 16PIN V3.0	1
81	ICV06	0430-4000-6104	IC LM324N DIP-14	1
82	LV01	0344-2280-0601	PEAKING COIL 0.22uH 1/4W K A-T	1
83	LV02	0344-2280-0601	PEAKING COIL 0.22uH 1/4W K A-T	1
84	LV03	0344-2280-0601	PEAKING COIL 0.22uH 1/4W K A-T	1
85	LV04	0344-3390-0601	PEAKING COIL 3.3uH 1/4W K A-T	1
86	LV05	0230-1259-0000	JUMPER WIRE 12.5*0.6mm	1
87	LV06	0370-0000-1210	FERRITE CORE A6 RH 3.5x9x0.8-T52	1
88	LV07	0370-0000-1210	FERRITE CORE A6 RH 3.5x9x0.8-T52	1
89	LV10	0370-0000-1110	FERRITE CORE W8 R6H 6x10 2 1/2 T	1
90	LV11	0130-4708-1450	RES. CF 4.7ohm 1/4W J A	1
91	LV12	0130-3309-1450	RES. CF 33ohm 1/4W J A	1
92	LV13	0370-0000-1210	FERRITE CORE A6 RH 3.5x9x0.8-T52	1
93	LV14	0370-0000-1210	FERRITE CORE A6 RH 3.5x9x0.8-T52	1
94	LV15	0344-3390-0601	PEAKING COIL 3.3uH 1/4W K A-T	1
95	LV16	0370-0000-1210	FERRITE CORE A6 RH 3.5x9x0.8-T52	1
96	PCB2	0171-1441-0191	PCB VIDEO BD FR4 150x120mmx1.6t D	1
97	QV04	0410-4000-3105	TRANSISTOR BF422 TO-92 T	1
98	QV05	0410-4000-3105	TRANSISTOR BF422 TO-92 T	1
99	QV06	0410-4000-3105	TRANSISTOR BF422 TO-92 T	1
100	RV01	0130-7509-1859	RES. CF 75ohm 1/8W J 1206	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
101	RV02	0130-7509-1859	RES. CF 75ohm 1/8W J 1206	1
102	RV03	0130-7509-1859	RES. CF 75ohm 1/8W J 1206	1
103	RV04	0130-4700-1859	RES. CF 470ohm 1/8W J 1206	1
104	RV07	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	1
105	RV08	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	1
106	RV09	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	1
107	RV10	0130-4709-1859	RES. CF 47ohm 1/8W J 1206	1
108	RV100	0130-1003-1859	RES. CF 100Kohm 1/8W J 1206	1
109	RV101	0130-1009-1859	RES. CF 10ohm 1/8W J 1206	1
110	RV102	0130-1009-1859	RES. CF 10ohm 1/8W J 1206	1
111	RV103	0130-1009-1859	RES. CF 10ohm 1/8W J 1206	1
112	RV105	0130-4301-1859	RES. CF 4.3Kohm 1/8W J 1206	1
113	RV109	0130-3309-1859	RES. CF 33ohm 1/8W J 1206	1
114	RV114	0130-3309-1859	RES. CF 33ohm 1/8W J 1206	1
115	RV115	0130-3309-1859	RES. CF 33ohm 1/8W J 1206	1
116	RV116	0130-3309-1859	RES. CF 33ohm 1/8W J 1206	1
117	RV12	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	1
118	RV13	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	1
119	RV14	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	1
120	RV15	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	1
121	RV16	0130-1803-1450	RES. CF 180Kohm 1/4W J A	1
122	RV19	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	1
123	RV21	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	1
124	RV24	0130-2201-1859	RES. CF 2.2Kohm 1/8W J 1206	1
125	RV28	0130-3309-1450	RES. CF 33ohm 1/4W J A	1
126	RV29	0130-2201-1859	RES. CF 2.2Kohm 1/8W J 1206	1
127	RV30	0130-3309-1450	RES. CF 33ohm 1/4W J A	1
128	RV31	0130-3309-1450	RES. CF 33ohm 1/4W J A	1
129	RV33	0130-1803-1450	RES. CF 180Kohm 1/4W J A	1
130	RV34	0130-1803-1450	RES. CF 180Kohm 1/4W J A	1
131	RV36	0130-4709-1450	RES. CF 47ohm 1/4W J A	1
132	RV37	0130-4709-1450	RES. CF 47ohm 1/4W J A	1
133	RV38	0130-4709-1450	RES. CF 47ohm 1/4W J A	1
134	RV43	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	1
135	RV44	0130-7502-1859	RES. CF 75Kohm 1/8W J 1206	1
136	RV45	0130-1000-1859	RES. CF 100ohm 1/8W J 1206	1
137	RV46	0130-7502-1859	RES. CF 75Kohm 1/8W J 1206	1
138	RV47	0130-7502-1859	RES. CF 75Kohm 1/8W J 1206	1
139	RV53	0130-3302-1450	RES. CF 33Kohm 1/4W J A	1
140	RV54	0130-3302-1450	RES. CF 33Kohm 1/4W J A	1
141	RV55	0130-3302-1450	RES. CF 33Kohm 1/4W J A	1
142	RV56	0130-1004-1859	RES. CF 1.0Mohm 1/8W J 1206	1
143	RV57	0130-1004-1859	RES. CF 1.0Mohm 1/8W J 1206	1
144	RV58	0130-1004-1859	RES. CF 1.0Mohm 1/8W J 1206	1
145	RV59	0130-1203-1859	RES. CF 120Kohm 1/8W J 1206	1
146	RV60	0130-1203-1859	RES. CF 120Kohm 1/8W J 1206	1
147	RV61	0130-1203-1859	RES. CF 120Kohm 1/8W J 1206	1
148	RV62	0130-1003-1250	RES. CF 100Kohm 1/2W J A	1
149	RV63	0130-1001-1250	RES. CF 1.0Kohm 1/2W J A	1
150	RV65	0130-1500-1859	RES. CF 150ohm 1/8W J 1206	1

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ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
151	RV66	0130-4700-1859	RES. CF 470ohm 1/8W J 1206	1
152	RV67	0130-4700-1859	RES. CF 470ohm 1/8W J 1206	1
153	RV68	0130-4700-1859	RES. CF 470ohm 1/8W J 1206	1
154	RV69	0130-4700-1859	RES. CF 470ohm 1/8W J 1206	1
155	RV70	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	1
156	RV71	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	1
157	RV72	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	1
158	RV73	0130-3301-1859	RES. CF 3.3Kohm 1/8W J 1206	1
159	RV74	0130-4709-1859	RES. CF 47ohm 1/8W J 1206	1
160	RV75	0130-4709-1859	RES. CF 47ohm 1/8W J 1206	1
161	RV76	0130-3309-1859	RES. CF 33ohm 1/8W J 1206	1
162	RV77	0130-3301-1859	RES. CF 3.3Kohm 1/8W J 1206	1
163	RV81	0130-1001-1859	RES. CF 1.0Kohm 1/8W J 1206	1
164	RV83	0130-3309-1859	RES. CF 33ohm 1/8W J 1206	1
165	RV84	0130-3309-1859	RES. CF 33ohm 1/8W J 1206	1
166	RV86	0130-4709-1859	RES. CF 47ohm 1/8W J 1206	1
167	RV87	0130-4708-1859	RES. CF 4.7ohm 1/8W J 1206	1
168	RV88	0130-4708-1859	RES. CF 4.7ohm 1/8W J 1206	1
169	RV89	0130-2201-1859	RES. CF 2.2Kohm 1/8W J 1206	1
170	RV90	0130-6800-1859	RES. CF 680ohm 1/8W J 1206	1
171	RV91	0130-4302-1859	RES. CF 43Kohm 1/8W J 1206	1
172	RV92	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	1
173	RV94	0130-1003-1859	RES. CF 100Kohm 1/8W J 1206	1
174	RV95	0130-5602-1859	RES. CF 56Kohm 1/8W J 1206	1
175	RV96	0130-4301-1859	RES. CF 4.3Kohm 1/8W J 1206	1
176	RV97	0130-4301-1859	RES. CF 4.3Kohm 1/8W J 1206	1
177	RV98	0130-1002-1859	RES. CF 10Kohm 1/8W J 1206	1
178	RV99	0130-4701-1859	RES. CF 4.7Kohm 1/8W J 1206	1
179	SGV01	0270-0002-0140	SPARK GAP 200V T	1
180	SGV02	0270-0002-0140	SPARK GAP 200V T	1
181	SGV03	0270-0002-0140	SPARK GAP 200V T	1
182	SGV04	0270-0001-2220	SPARK GAP 1.2KV A	1
183	SGV05	0270-0003-0104	SPARK GAP 300V T R	1
184	WV01	0451-2500-0744	WAFER 2.50mm 7P 90' Kink	1
185	WV02	0451-2500-1244	WAFER 2.50mm 12P 90' Kink	1
186	WV04	0452-1000-0296	WAFER 10mm 2P(BLACK)	1
187	WV05	0261-0000-0064	CRT SOCKET ISDW01S HITACHI	1
188	WV08	0451-2500-0244	WAFER 2.50mm 2P 90' Kink	1
189	ZDV01	0400-0891-2000	ZENER 9C1 8.9-9.3V 1/2W	1

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11.8. 3021-0242-0306 BEZEL ASS'Y

ITEM	LOC.	PART NO.	DESCRIPTION	Q'TY
1	BZ01	3017-0142-0156	ASS'Y DISPLAY BD PF775	1
2	BZ06	0333-2100-0320	PURITY COIL 21" 180ohm 0.20x200Ts	1
3	BZ07	1701-0105-8010	BEZEL VIEWSONIC GS815 G7397 PC+ABS	1
4	BZ09	1701-0405-5000	POWER KNOB G7397 GS815	1
5	BZ10	1701-0405-6000	FUNCTION KNOB G7397 GS815	1
6	BZ12	1712-0700-0600	SPRING/PT771/P795	1
7	BZ14	1724-2304-1402	SCREW,BBC,M4.0x14L,Zn-Cc	20
8	BZ15	1724-2603-0802	SCREW,BTCW,M3.0x8L,Zz-Cc	6

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Chapter 12. Schematic Diagrams

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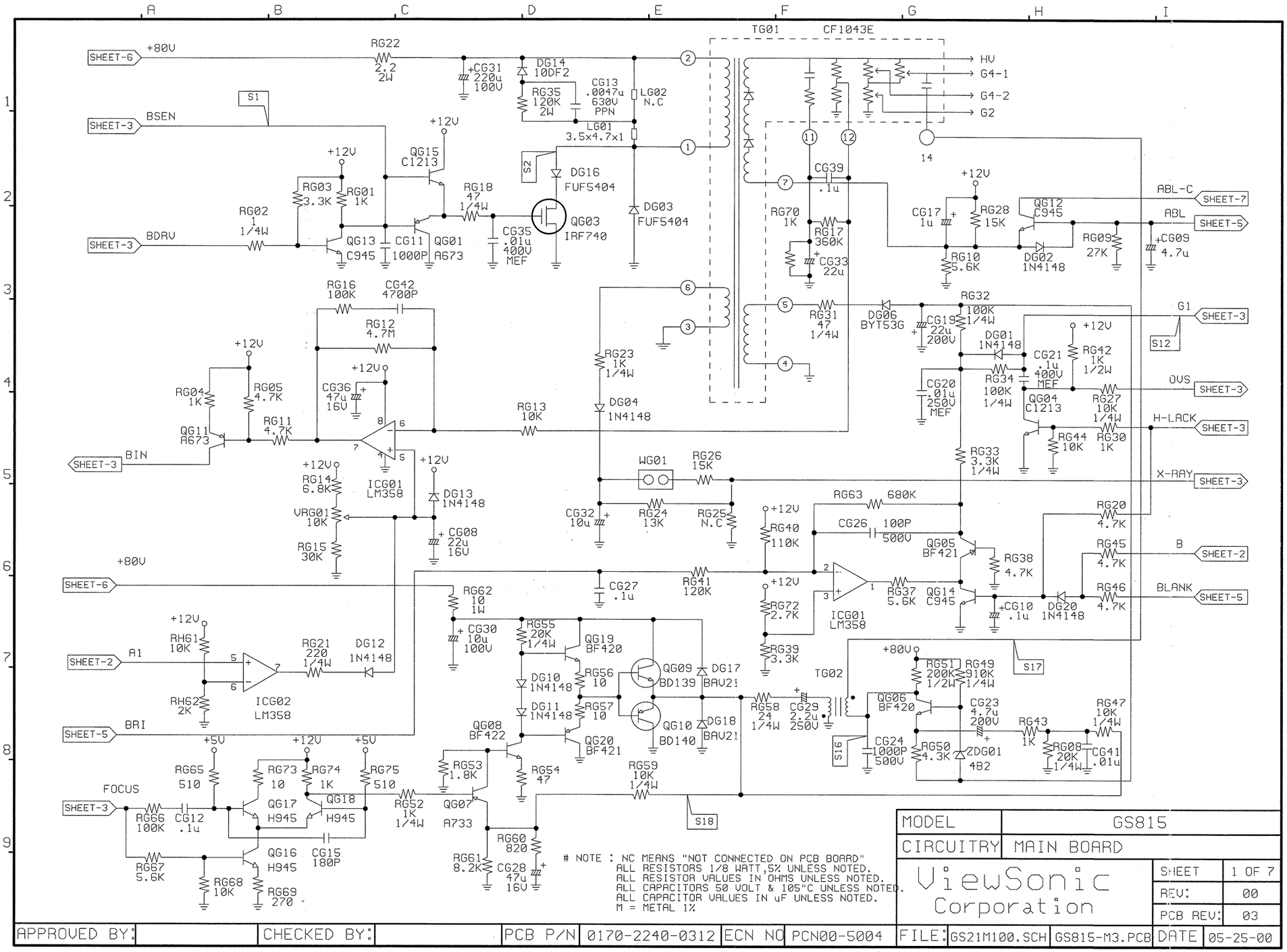

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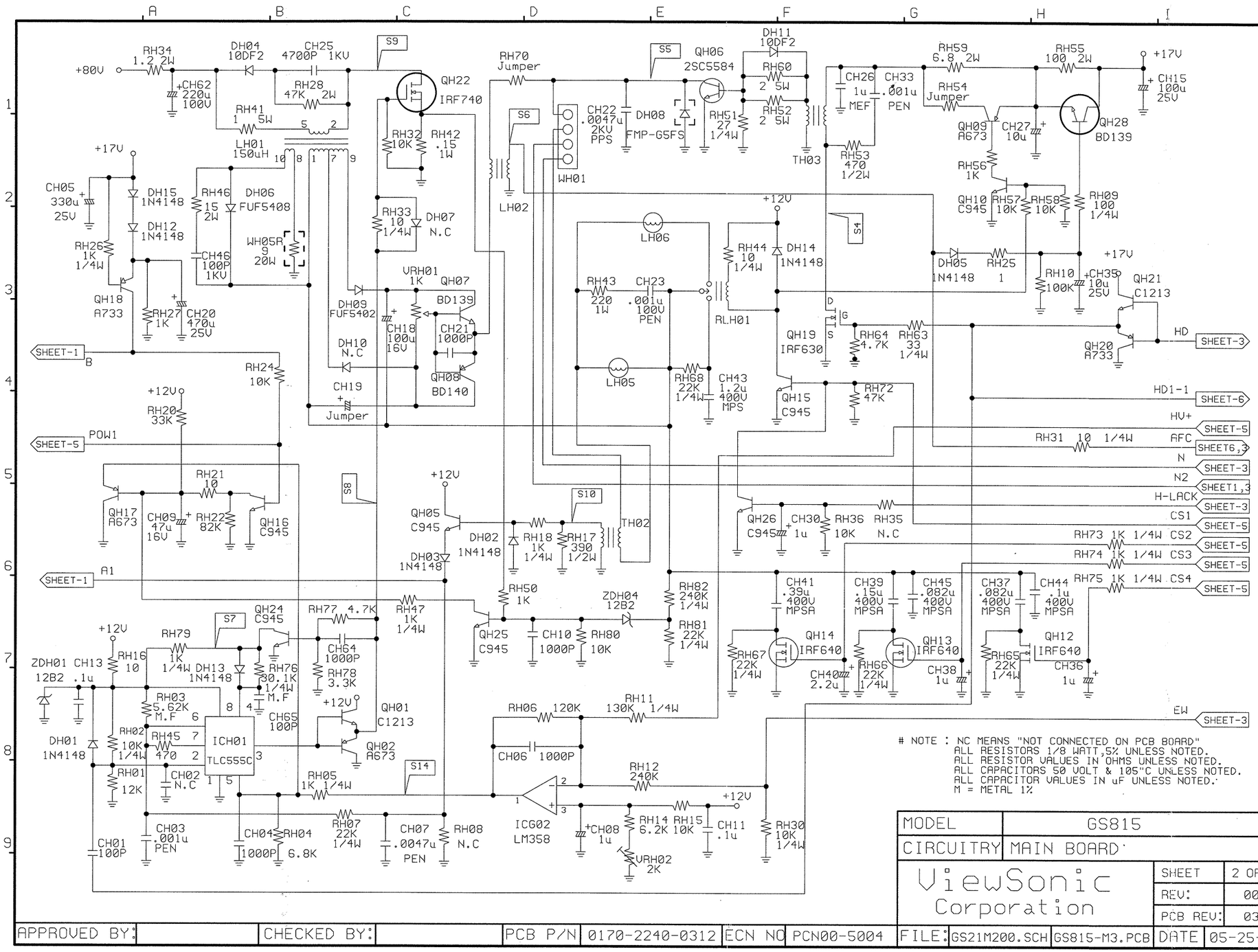
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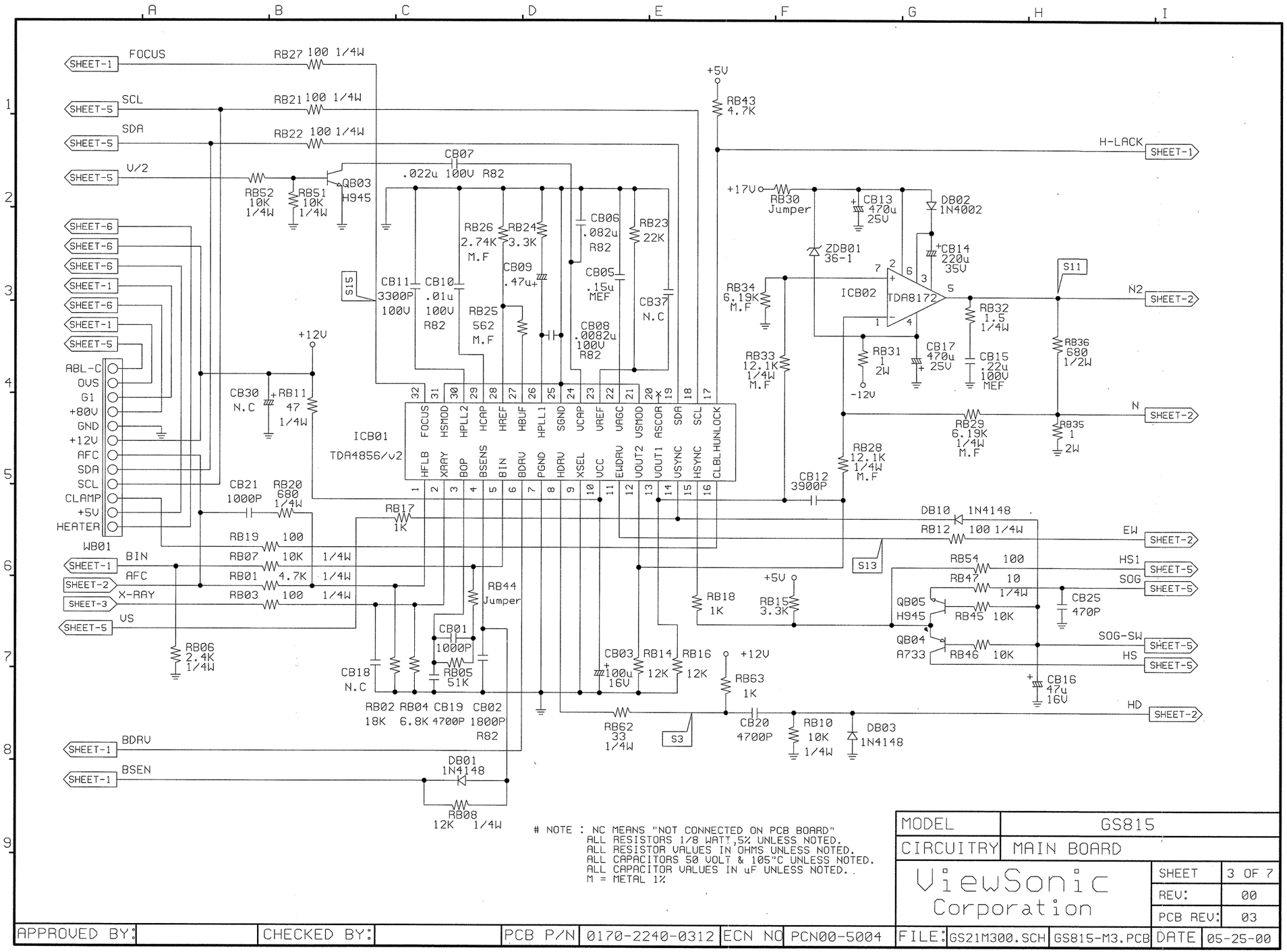
RH34 1.2 2W
DH04 10DF2
CH25 4700P 1KV
S9
+CH62 220u 100V
RH28 47K 2W
RH41 1 5W
LH01 150uH
QH22 IRF740
RH32 10K
RH42 .15 1W
RH70 Jumper
S6
LH02
WH01
S5
QH06 2SC5584
CH22 .0047u 2KV PPS
DH08 FMP-G5FS
RH51 27 1/4W
DH11 10DF2
RH60 2 5W
RH52 2 5W
TH03
CH26 1u MEF
CH33 .001u PEN
RH53 470 1/2W
RH59 6.8 2W
RH55 100 2W
+17V
+CH15 100u 25V
RH54 Jumper
QH09 A673
CH27 10u
QH28 BD139
RH56 1K
QH10 C945
RH57 10K
RH58 10K
RH09 100 1/4W
CH05 330u 25V
DH15 1N4148
DH12 1N4148
RH26 1K 1/4W
QH18 A733
RH27 1K
CH20 470u 25V
RH46 15 2W
DH06 FUF5408
CH46 100P 1KV
WH05R 9 20W
RH33 10 1/4W
DH07 N.C
VRH01 1K
QH07 BD139
CH18 100u 16V
CH21 1000P
QH08 BD140
DH09 FUF5402
DH10 N.C
CH19 Jumper
SHEET-1 B
RH24 10K
+12V
RH20 33K
SHEET-5 POW1
RH21 10
QH17 A673
CH09 47u 16V
RH22 82K
QH16 C945
S8
S10
TH02
QH05 C945
DH02 1N4148
DH03 1N4148
RH18 1K 1/4W
RH17 390 1/2W
SHEET-1 A1
RH50 1K
ZDH04 12B2
RH82 240K 1/4W
RH81 22K 1/4W
QH25 C945
CH10 1000P
RH80 10K
RH47 1K 1/4W
RH77 4.7K
CH64 1000P
RH78 3.3K
QH24 C945
S7
RH79 1K 1/4W
DH13 1N4148
RH76 80.1K 1/4W
M.F
CH65 100P
+12V
QH01 C1213
QH02 A673
ICH01 TLC555C
RH03 5.62K M.F
RH02 10K 1/4W
RH45 470
RH01 12K
CH02 N.C
RH05 1K 1/4W
S14
ZDH01 12B2
CH13 .1u
RH16 10
DH01 1N4148
CH03 .001u PEN
CH01 100P
CH04 1000P
RH04 6.8K
RH07 22K 1/4W
CH07 .0047u PEN
RH08 N.C
RH06 120K
CH06 1000P
RH11 130K 1/4W
RH12 240K
ICG02 LM358
+CH08 1u
RH14 6.2K
RH15 10K
CH11 .1u
VRH02 2K
RH30 10K 1/4W
+12V
LH06
LH05
RH43 220 1W
CH23 .001u 100V PEN
RH68 22K 1/4W
CH43 1.2u 400V MPS
RLH01
RH44 10 1/4W
DH14 1N4148
S4
QH19 IRF630
QH15 C945
RH72 47K
RH64 4.7K
RH63 33 1/4W
DH05 1N4148
RH25 1
RH10 100K
+CH35 10u 25V
QH21 C1213
QH20 A733
HD
SHEET-3
HD1-1
SHEET-6
HV+
SHEET-5
RH31 10 1/4W AFC
SHEET6,3
N
SHEET-3
N2
SHEET-3
H-LACK
SHEET1,3
CS1
SHEET-3
RH73 1K 1/4W CS2
SHEET-5
RH74 1K 1/4W CS3
SHEET-5
RH75 1K 1/4W CS4
SHEET-5
QH26 C945
CH30 1u
RH36 10K
RH35 N.C
CH41 .39u 400V MPSA
CH39 .15u 400V MPSA
CH45 .082u 400V MPSA
CH37 .082u 400V MPSA
CH44 .1u 400V MPSA
QH14 IRF640
QH13 IRF640
QH12 IRF640
RH67 22K 1/4W
RH66 22K 1/4W
RH65 22K 1/4W
CH40 2.2u
CH38 1u
CH36 1u
EW
SHEET-3
NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/8 WATT,5% UNLESS NOTED.
ALL RESISTOR VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
M = METAL 1%
MODEL GS815
CIRCUITRY MAIN BOARD
ViewSonic Corporation
SHEET 2 OF 7
REV: 00
PCB REV: 03
APPROVED BY:
CHECKED BY:
PCB P/N 0170-2240-0312
ECN NO PCN00-5004
FILE: GS21M200.SCH GS815-M3.PCB
DATE 05-25-00

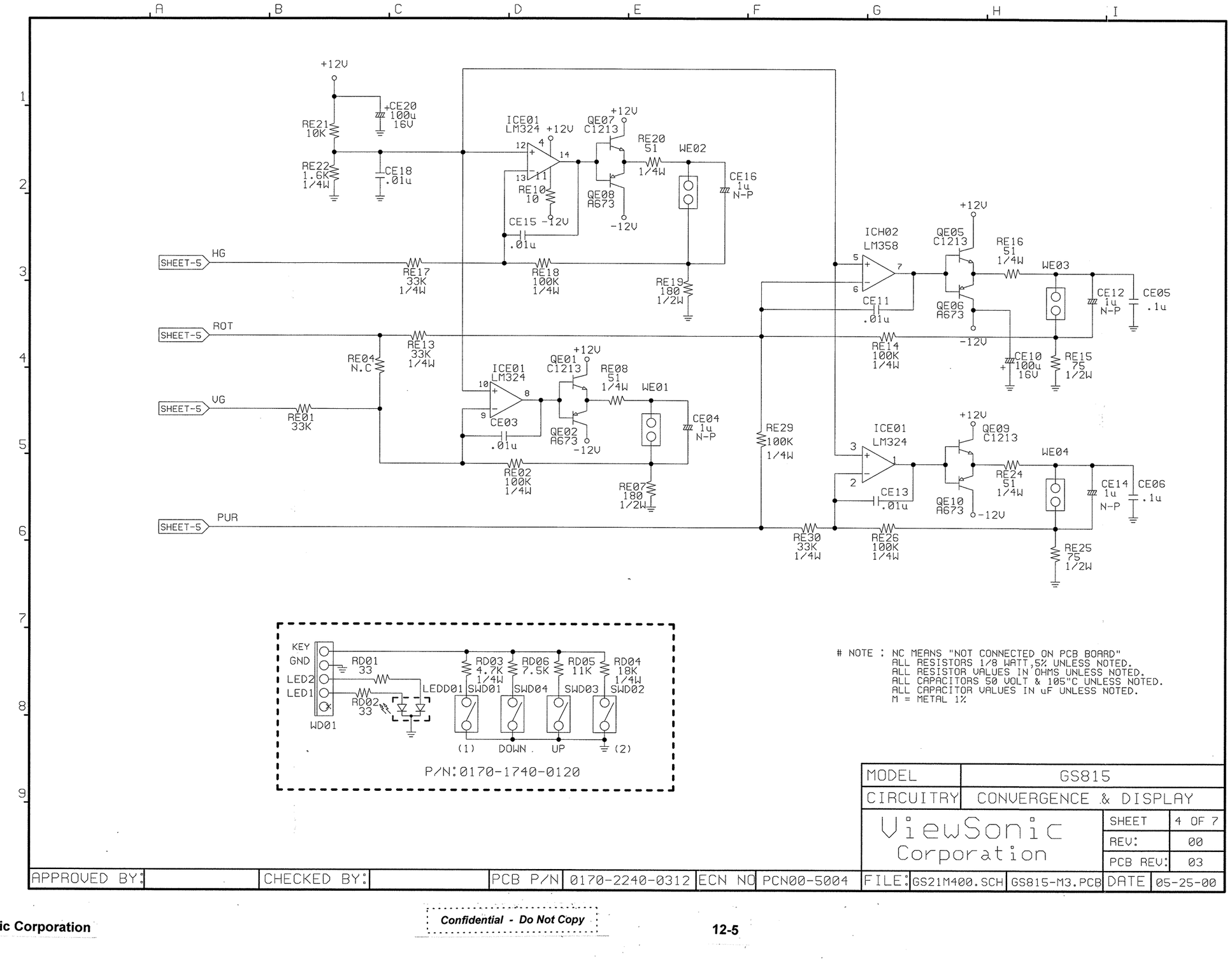


NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/8 WATT,5% UNLESS NOTED.
ALL RESISTOR VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
M = METAL 1%

APPROVED BY:		CHECKED BY:		PCB P/N	0170-2240-0312	ECN NO	PCN00-5004	FILE:	GS21M300.SCH	GS815-M3.PCB	DATE 05-25-00

MODEL	GS815
CIRCUITRY	MAIN BOARD
SHEET	3 OF 7
REV:	00
PCB REV:	03

ViewSonic Corporation



NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/8 WATT,5% UNLESS NOTED.
ALL RESISTOR VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
M = METAL 1%

APPROVED BY:		CHECKED BY:		PCB P/N	0170-2240-0312	ECN NO	PCN00-5004	FILE:	GS21M400.SCH GS815-M3.PCB

MODEL	GS815
CIRCUITRY	CONVERGENCE & DISPLAY
ViewSonic Corporation	SHEET 4 OF 7
	REV: 00
	PCB REV: 03
	DATE 05-25-00

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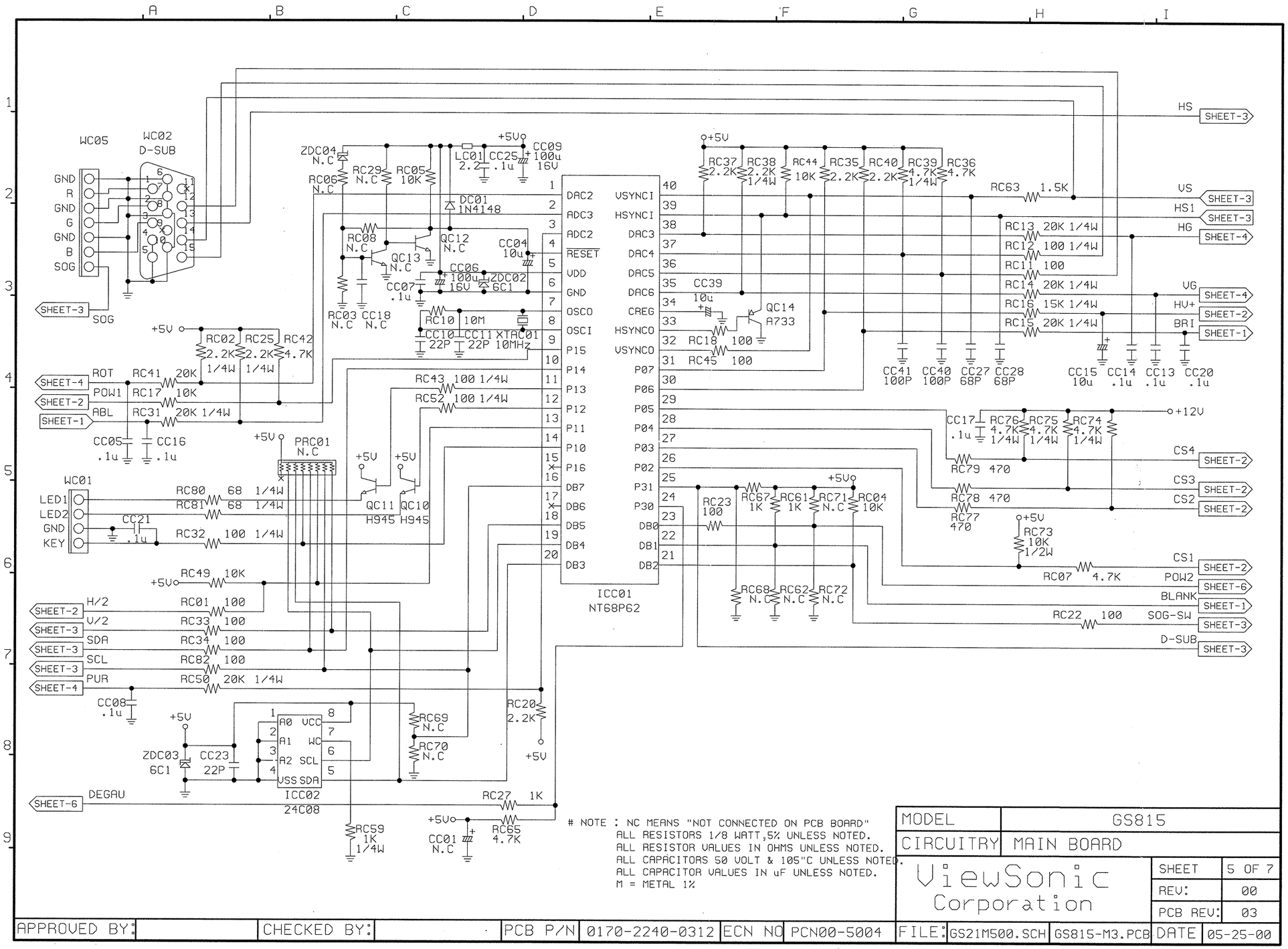

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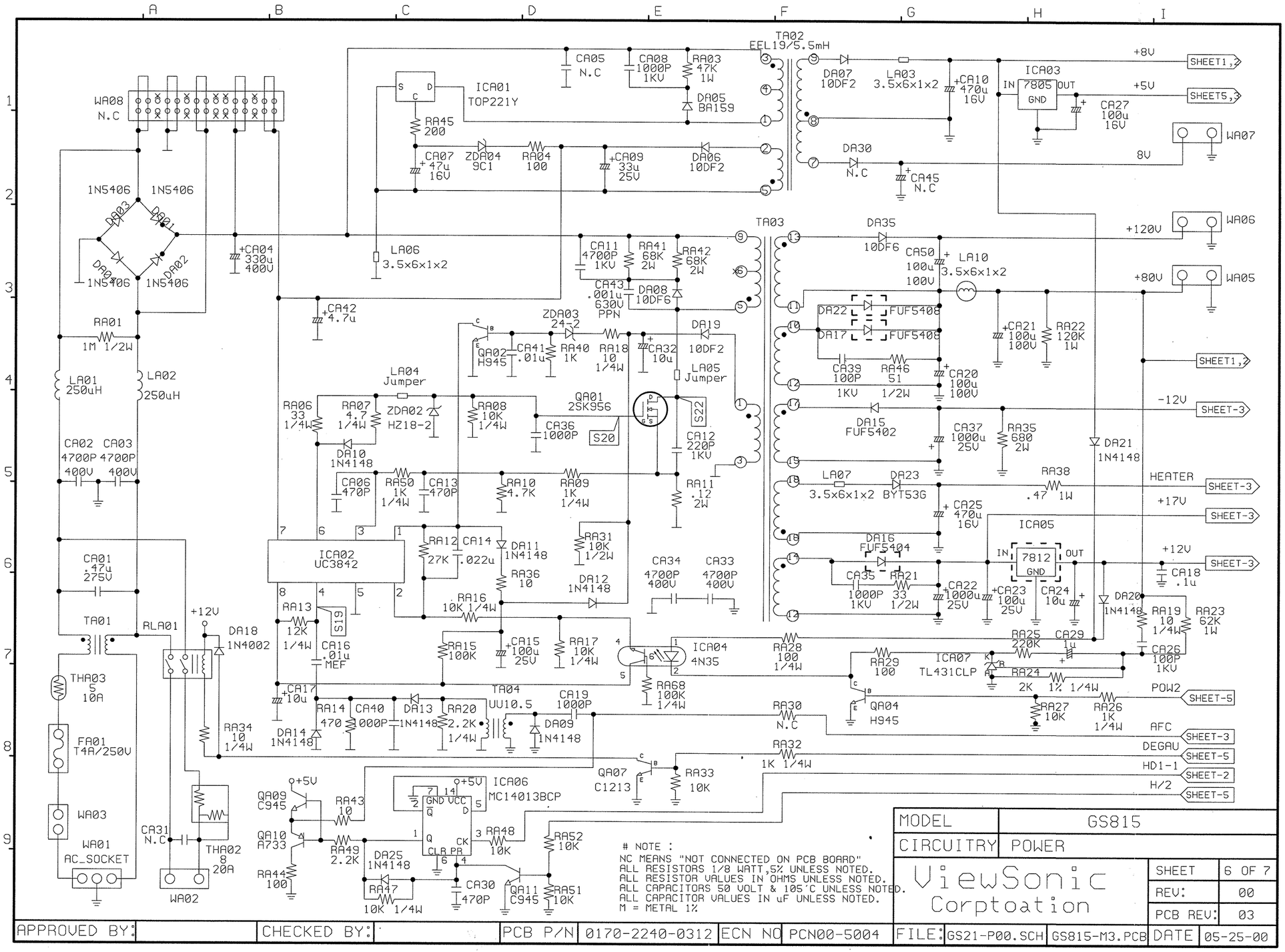

NOTE :

NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/8 WATT,5% UNLESS NOTED.
ALL RESISTOR VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105'C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
M = METAL 1%

APPROVED BY:		CHECKED BY:		PCB P/N	0170-2240-0312	ECN NO	PCN00-5004	FILE:	GS21-P00.SCH	GS815-M3.PCB	DATE 05-25-00

MODEL	GS815
CIRCUITRY	POWER
ViewSonic Corptoation	SHEET 6 OF 7
	REV: 00
	PCB REV: 03

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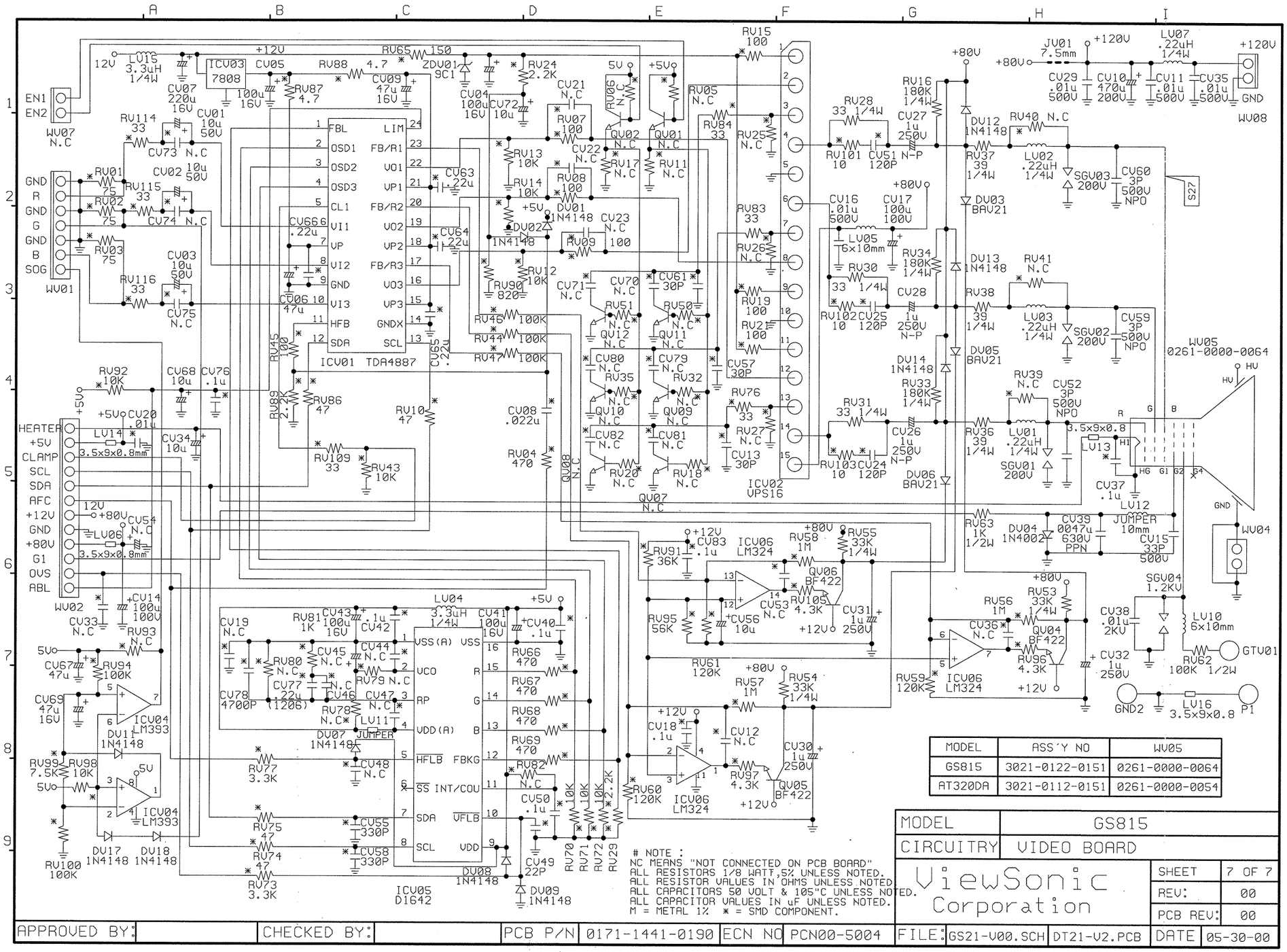
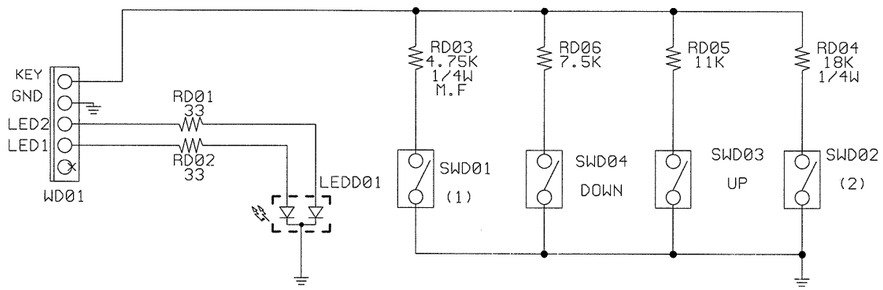


MODEL	ASS'Y NO	WV05
GS815	3021-0122-0151	0261-0000-0064
AT320DA	3021-0112-0151	0261-0000-0054

NOTE :
NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/8 WATT,5% UNLESS NOTED.
ALL RESISTOR VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
M = METAL 1% * = SMD COMPONENT.

APPROVED BY:		CHECKED BY:		PCB P/N	0171-1441-0190	ECN NO	PCN00-5004	FILE:	GS21-V00.SCH	DT21-V2.PCB	DATE 05-30-00

MODEL	GS815		
CIRCUITRY	VIDEO BOARD		
ViewSonic Corporation		SHEET	7 OF 7
		REV:	00
		PCB REV:	00



P/N:0170-1740-0120

NOTE : NC MEANS "NOT CONNECTED ON PCB BOARD"
ALL RESISTORS 1/8 WATT,5% UNLESS NOTED.
ALL RESISTOR VALUES IN OHMS UNLESS NOTED.
ALL CAPACITORS 50 VOLT & 105"C UNLESS NOTED.
ALL CAPACITOR VALUES IN uF UNLESS NOTED.
M = METAL 1%

APPROVED BY:		CHECKED BY:		PCB P/N	0170-1740-0120	ECN NO	ECN00-7001	FILE:	VG21-D00.SCH	P775D000.PCB	DATE 08-07-00

MODEL	GS815
CIRCUITRY	DISPLAY BD.
ViewSonic Corporation	SHEET 1 OF 1
	REV: 00
	PCB REV: 00

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Chapter 13 PCB Layouts

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P/N: 0174-2240-0313
K1 1/0Z 1.6T
DATE: 07-21-00
REC.: 07-31
FILE: GSB15-M4.PCB
SIZE: 337x271mm

0174-2240-0313

337x271mm
GSB15-M4.PCB
07-21-2000

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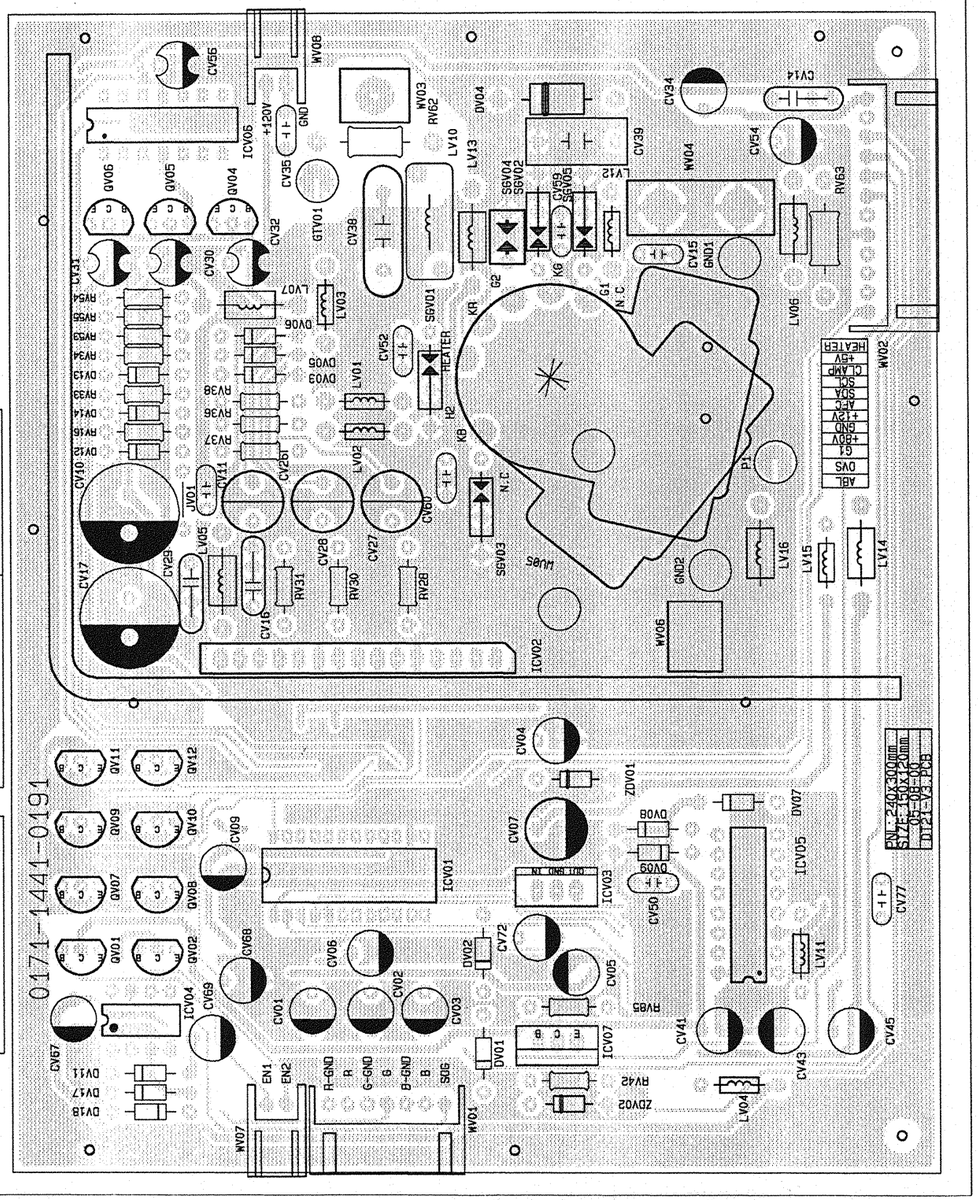
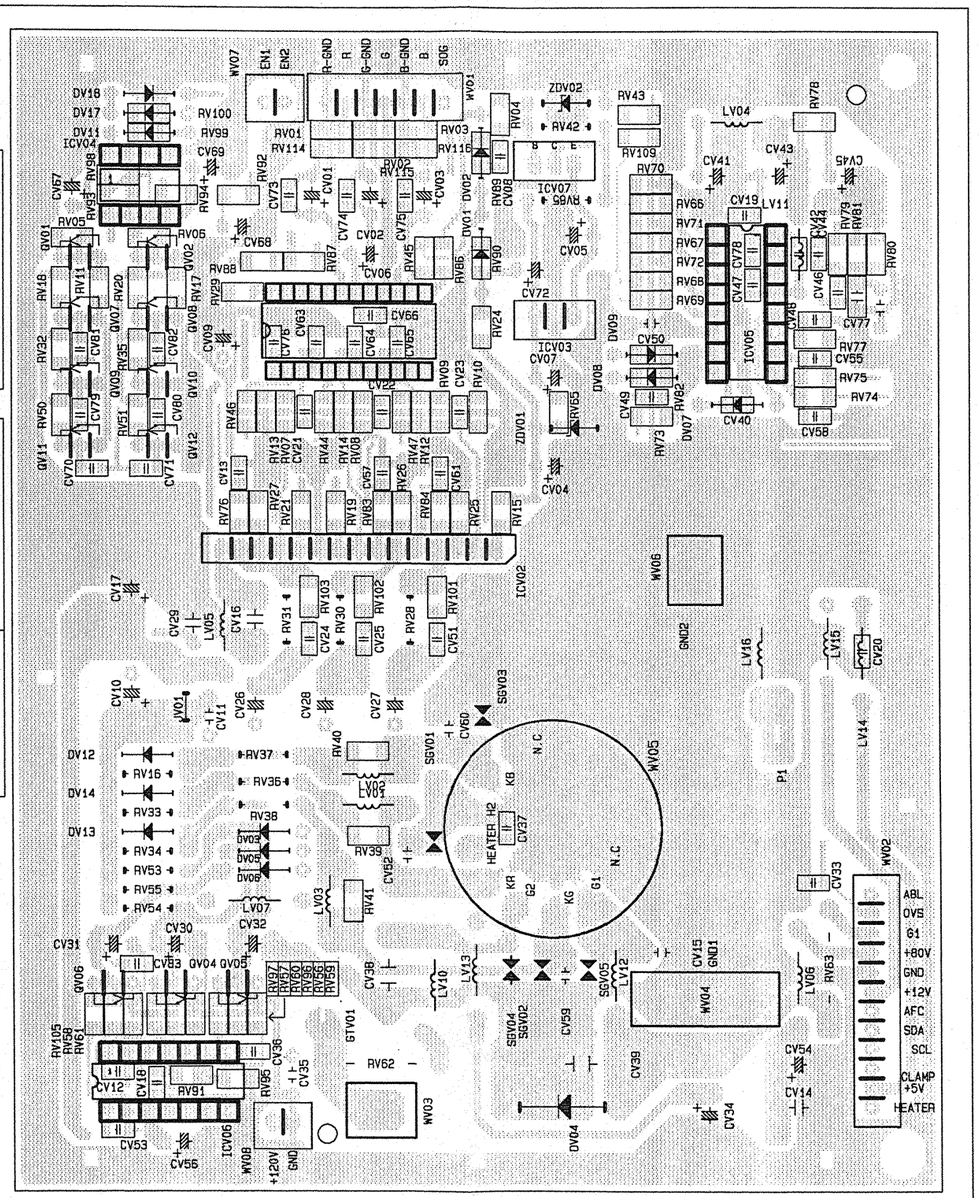
CAUTION:
FOR CONTINUED AGAINST RISK OF FIRE,
REPLACE ONLY WITH SAME TYPE AND RATINGS
OF FUSE: T4A 250V

P/N: 0174-2540-0313
K1 1/02 1.6T
DATE: 07-31-00
REC.: 07-31
FILE: 6S815-M4.PCB
SIZE: 337x271mm

	DATE: 05-08-00
P/N: 0171-1441-0191	REC DATE: 05-15
SIZE: 150.0x120.0mm	Q'TY: 05 PNL
1/1z, 1.6t, FR4	DT21-V3.PCB

DRAWING BY:
CHECK BY:





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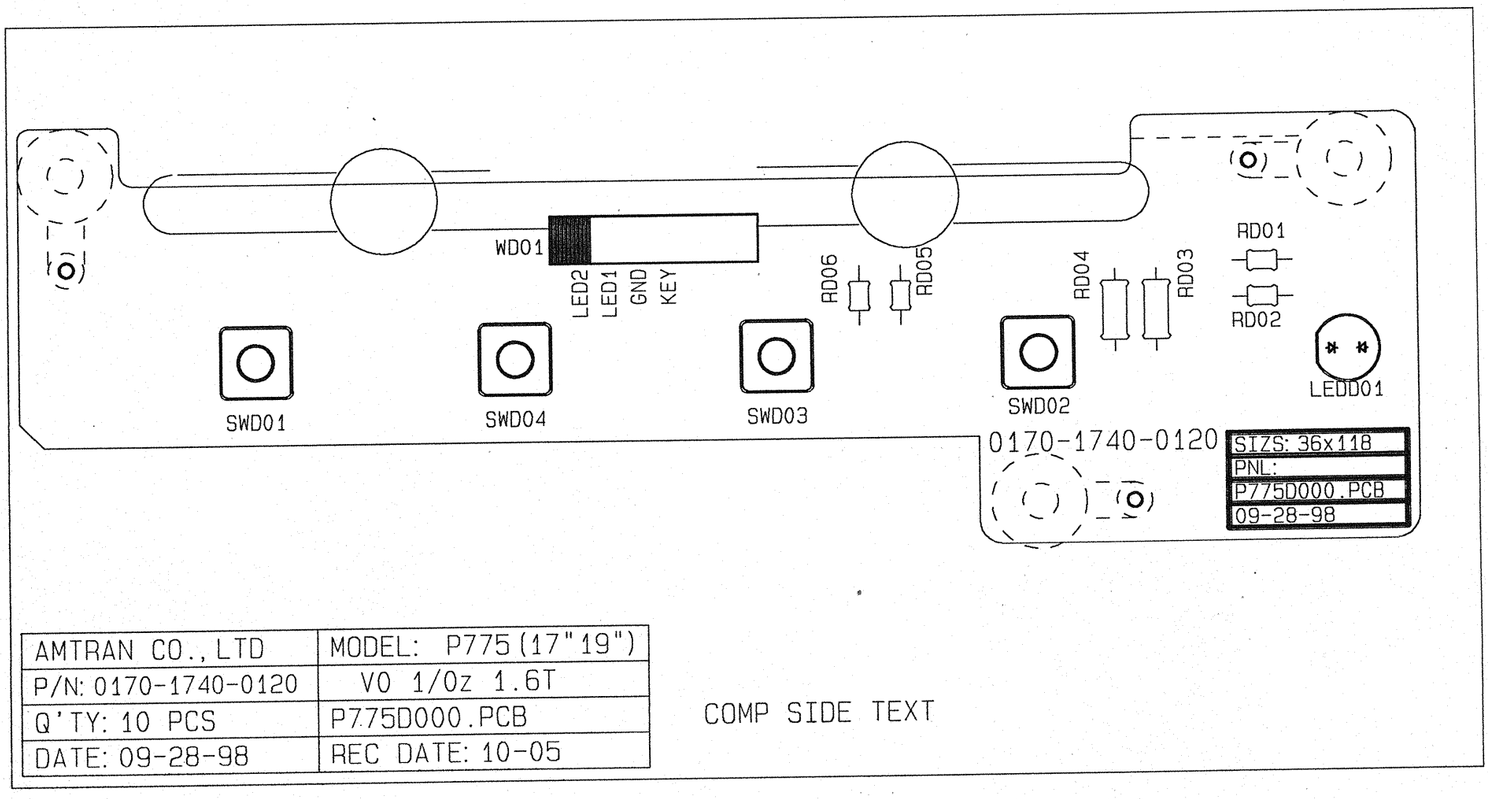
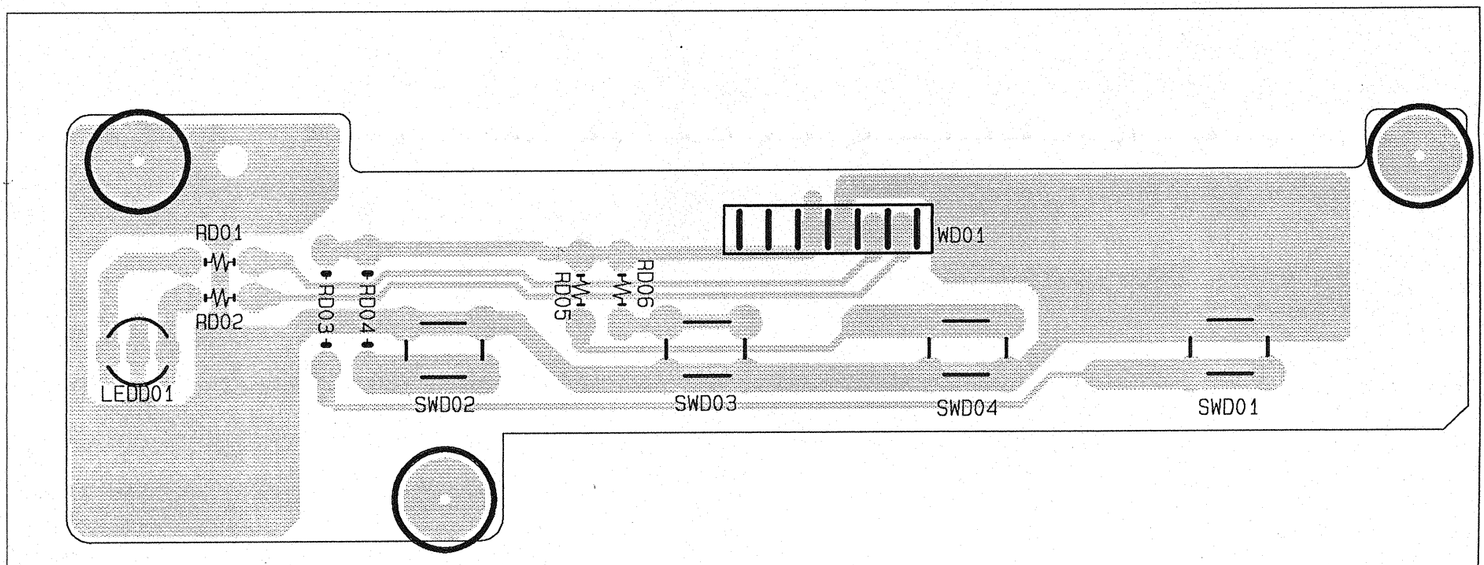


AMTRAN CO., LTD	MODEL: P775(17"19")
P/N: 0170-1740-0120	V0 1/0z 1.6T
Q'TY: 10 PCS	P775D000.PCB
DATE: 09-28-98	REC DATE: 10-05

COMP SIDE TEXT



MODEL: P775(17"19")	
V0 1/0z 1.6T	P/N: 0170-1740-0120
P775D000.PCB	Q'TY: 10 PCS
REC DATE: 10-05	DATE: 09-28-98

SOLDER SIDE TEXT

Chapter 14 Exploded View and Parts List

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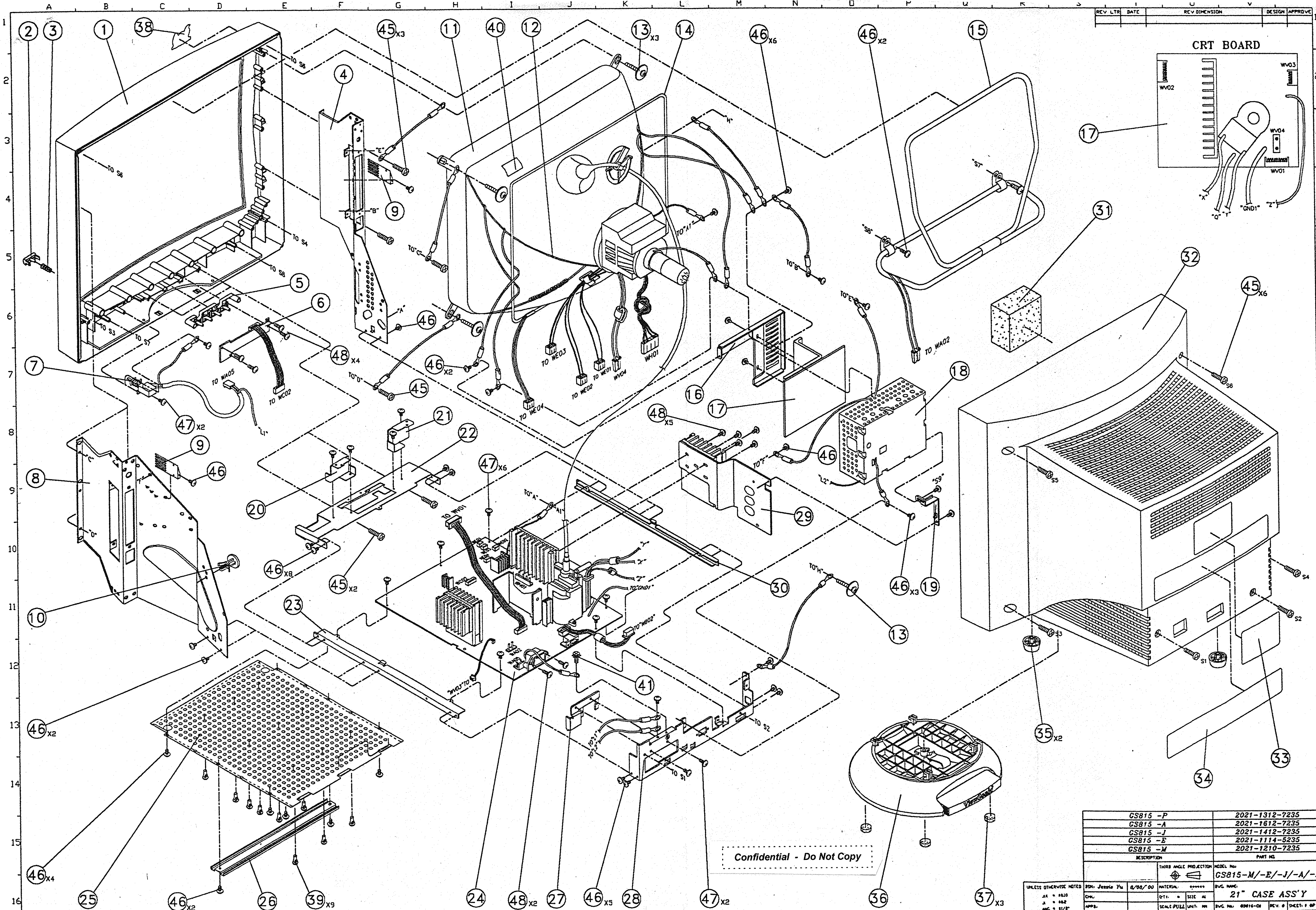
CRT BOARD
WV02
WV03
WV04
WV01
"X"
"Q"
"Y"
"GND1"
"Z"
TO S6
TO S4
TO S8
TO S3
TO S7
TO WA05
TO WC02
TO WE03
TO WE02
TO WE01
WV04
WH01
TO WE04
TO WA02
TO "A1"
TO "B"
TO "C"
TO "D"
TO "E"
TO "F"
TO "H"
TO "A"
TO WV01
TO "GND1"
TO "WB02"
"WV03" TO
TO S1
TO S2
"L1"
"L2"
"S7"
"S8"
"S9"
REV LTR
DATE
REV DIMENSION
DESIGN
APPROVE
GS815 -P 2021-1312-7235
GS815 -A 2021-1612-7235
GS815 -J 2021-1412-7235
GS815 -E 2021-1114-5235
GS815 -M 2021-1210-7235
DESCRIPTION
PART NO.
THIRD ANGLE PROJECTION
MODEL No.: GS815-M/-E/-J/-A/-P
DWG. NAME: 21" CASE ASS'Y
DSN: Jessie Yu
8/08/00
UNLESS OTHERWISE NOTED
MATERIAL
SCALE: FULL
UNIT: MM
SIZE: A1
REV. 0

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ViewSonic Corporation

REV LTR	DATE	REV.DIMENSION	DESIGN	APPROVE
1				

ITEM	PART NO.	DESCRIPTION	QTY
1	1701-0105-8010	BEZEL VIEWSONIC GS815 G7397 PC+ABS	1
2	1701-0405-5000	POWER KNOB G7397 GS815	1
3	1712-0700-0600	SPRING/PT771/P795	1
4	1712-0100-0032	SUPPORT BRACKET LEFT AT398HA,AT320DB	1
5	1701-0405-6000	FUNCTION KNOB GS815	1
6	3017-0142-0156	ASS'Y DISPLAY BD PF775	1
7	0220-2020-0261	SW PUSH BOTTON SFDLD11E7U-AA	1
8	1712-0100-0042	SUPPORT BRACKET RIGHT/AT398HA	1
9	1712-0600-0010	COPPER CLAW AT398HA	2
10	1701-1500-0150	SPACER SUPPORT ACBS-9Y	1
11	0210-0210-1353	CRT 21" M51LQV183X48 (A) HIT. .25mm	1
12	0460-2202-0082	BRAID 0.12/112C 1015#18 1030mm	1
13	1724-3705-2502	SCREW, BPCTW,#5.0*25L,Zn-Cc	4
14	0333-2100-0320	PURITY COIL 21" 180ohm 0.20x200Ts	1
15	0330-2100-0320	DEGAUSSING 21" 19.6 ohm 0.5x90Ts	1
16	1712-0300-0030	VIDEO BD SHIELDING	1
17	3021-0122-0151	ASS'Y VIDEO BD GS815	1
18	1712-0500-016X	CTR BD SHIELDING-A	1
19	1712-0100-1302	CRT BOARD BRACKET	1
20	1712-0100-019X	CRD SUPPORT - R	1
21	1712-0100-018X	CRT SUPPORT - L	1
22	1712-0100-05XX	CHASSIS BKT FRONT	1
23	1712-0100-01XX	CHASSIS BKT RIGHT	1
24	3021-0062-0150	ASS'Y MAIN/PWR/CTRL BD GS815	1
25	1712-0500-0172	BOTTOM SHIELDING AT1097FB,AT1099DB	1
26	1712-0100-0080	CHASSIS HOLDER AT398HA	1
27	1712-0100-047X	AC BRACKET	1
28	1712-0100-32XX	CHASSIS BRACKET REAR/AT897D	1
29	1712-0300-0230	HEAT SINK FOR EMI	1
30	1712-0100-0154	CHASSIS BRACKET LEFT	1
31	1947-1500-1400	SPONGE 75Lx75Wx55T	1
32	1701-0202-2000	BACK COVER GS815 D-SUB ONLY	1
33	1936-1000-0070	V.SONIC MYLAR-PLATE	1
34	1936-1100-1860	B/C LBL VIEWSONIC GS815	1

ITEM	PART NO.	DESCRIPTION	QTY
35	1701-1000-0100	PLASTIC FOOT /GL-24H	1
36	3021-0062-0301	BASE(USB) ASS'Y 170105054010	1
37	1701-1000-0200	BASE FOOT 18.8x5.8t	3
38	1936-1000-0060	V.SONIC LOGO-B(AL. PLATE)	1
39	1701-1500-0900	SPACER SUPPORTS/FCB-10	9
40	1936-1500-0200	FDA WARNING LBL AT396D	1
41	1724-3804-0802	SCREW,PBATW,M4.0*8L,Zz-Cc	1
45	1724-2304-1402	SCREW,BBC,M4.0*14L,Zn-Cc	-
46	1724-2603-0802	SCREW,BTCW,M3.0*8L,Zz-Cc	-
47	1724-2603-0602	SCREW,BTCW,M3.0*6L,Zz-Cc	-
48	1724-2603-0602	SCREW,BTCW,M3.0*10L,Zz-Cc	-

GS815 -P	2021-1312-7235
GS815 -A	2021-1612-7235
GS815 -J	2021-1412-7235
GS815 -E	2021-1114-5235
GS815 -M	2021-1210-7235
DESCRIPTION	PART NO.

ViewSonic Corporation

THIRD ANGLE PROJECTION

MODEL No.: GS815-M/-E/-J/-A/-P

UNLESS OTHERWISE NOTED
.XX = ±0.10
.X = ±0.2
ANG. = ±1/2°

DSN.: Jessie Yu	8/08/'00	MATERIAL: ******		DWG. NAME: 21" CASE ASS'Y
CHK.:		Q'TY: *	SIZE: A4	
APPD.:		SCALE: *:*	UNIT: MM	DWG. No.: GS815-CA / REV. 01 / SHEET: 2 OF 2

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